



Advancing estuarine management  
through LEG instruments in law: the  
case of Knysna Municipality

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*Only when the last tree has died, and the last river has been poisoned, and the last fish has been caught will we realise that we cannot eat money.*

- Cree proverb

## **ABSTRACT**

The Knysna Estuary is ranked highest in South Africa in terms of its conservational importance. In general, estuaries have been identified as the most threatened and least protected ecosystems in South Africa. The Knysna Estuary has been experiencing negative impacts from anthropogenic activities. While it is under the management of South African National Parks (SANParks), the current management strategy does not account for any external influences as these are typically outside the managing authority's control. Efforts at the local government level have the potential to contribute to the protection of the Knysna Estuary.

South African municipalities have a constitutional and statutory duty to protect the environment. This duty is entrenched in local government framework law, and most importantly in the *Constitution of the Republic of South Africa, 1996*, which states that one of the objects of local government is to promote a safe and healthy environment. South Africa's national environmental law framework further requires municipalities to develop and adopt several instruments aimed at achieving so-called Local Environmental Governance (LEG) objectives. LEG refers to the environmentally relevant outputs and processes conducted at the strategic, tactical, and operational levels in municipalities, thus integrating environmental matters with local processes, plans, and policies. LEG instruments, such as the Integrated Development Plan, for example, are expected to help realise environmental objectives.

Against this backdrop, this study aims to determine to what extent the Knysna Municipality's LEG instruments as provided in law are, or could be, utilised to advance the co-management of the Knysna Estuary.

**Keywords:** Knysna Municipality; Knysna Estuary; estuarine management; local environmental governance instruments; environmental law; local government law; constitutional law; South Africa

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## **LIST OF ABBREVIATIONS**

AGSA	Auditor-General of South Africa
AJDS	Africa Journal of Development Studies
DEA	Department of Environmental Affairs
DFFE	Department of Forestry, Fisheries, and the Environment
DMA	Disaster Management Act 57 of 2002
DWS	Department of Water and Sanitation
EMP	Estuarine Management Plan
GG	Government Gazette
GN	Government Notice
IDP	Integrated Development Plan
JOL	International Journal of Law
KPI	Key Performance Indicator
LEG	Local Environmental Governance
MEC	Member of the Executive Council
D-MOSS	Durban Municipality Open Space Systems
MPA	Marine Protected Area
MFMA	Local Government: Municipal Finance Management Act 56 of 2003
NEM:ICMA	National Environmental Management Integrated Coastal Management Act 24 of 2008

NEM:BA	National Environmental Management Biodiversity Act 10 of 2004
NEM:PAA	National Environmental Management Protected Areas Act 57 of 2003
NEM:WA	National Environmental Management Waste Act 59 of 2008
NEMA	National Environmental Management Act 107 of 1998
NGO	Non-Governmental Organisation
NMMU	Nelson Mandela Metropolitan University
NWA	National Water Act 36 of 1998
PER	Potchefstroom Electronic Law Journal
SAJHR	South African Journal of Human Rights
SALGA	South African Local Government Association
SANRAL	The South African National Roads Agency SOC Ltd
SANBI	South African National Biodiversity Institute
SANParks	South African National Parks
SCA	Supreme Court of Appeal
SDBIP	Service Delivery and Budget Implementation Plan
SDF	Spatial Development Framework
SPLUMA	Spatial Planning and Land Use Management Act 16 of 2013
UBC Press	University of British Columbia Press

UNESCO	United Nations Educational, Scientific and Cultural Organisation
WC	Western Cape
WCLUPA	Western Cape Land Use Planning Act 3 of 2014
WWTW	Wastewater Treatment Works
ZAWCHC	South Africa: Western Cape Division of the High Court
ZASCA	South Africa: Supreme Court of Appeal

# CHAPTER 1 INTRODUCTION

## 1.1 Background and scope

There is a worldwide drive to combat activities that have a detrimental effect on the environment.<sup>1</sup> The spotlight partially falls on decision-makers such as public governors to advance governance structures for better environmental outcomes.<sup>2</sup> Ultimately, achieving environmental outcomes requires intervention at all levels, including the sub-national level.<sup>3</sup> In South Africa, local government often takes the role of executory agent in terms of national and provincial law in relation to environmental matters, and relevant environmental duties and functions are increasingly being assigned to local government.<sup>4</sup> Therefore, municipalities as sub-national public authorities are co-responsible for environmental governance and for ensuring overall sustainability in the South African context.<sup>5</sup> This is further cemented by municipalities' constitutionally entrenched mandate to promote a safe and healthy environment.<sup>6</sup>

Knysna Municipality is a Category B municipality in the Western Cape Province of South Africa.<sup>7</sup> This municipal area is made up of eleven wards and covers a total of 1059 square kilometres stretching from Sedgefield's Swartvlei in the West to Brackenhill in the East.<sup>8</sup> The area and surrounds are a natural treasure chest and are home to both forest and aquatic biomes. The municipal area forms part of the Garden Route Biosphere Reserve, which the United Nations Educational, Scientific and Cultural Organisation (UNESCO) recognised as South Africa's 9<sup>th</sup> Biosphere

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<sup>1</sup> Gök and Sodhi 2021 *Environmental Science and Pollution Research* 32996.

<sup>2</sup> Gök and Sodhi 2021 *Environmental Science and Pollution Research* 32996.

<sup>3</sup> Du Plessis 2017 *Law Democracy and Development* 244.

<sup>4</sup> Du Plessis 2010 *Stellenbosch Law Review* 266.

<sup>5</sup> Nkhabhu *The role of local government in the implementation of Sustainable Development Goals: A Case of Tshwane Municipality* 7. Environmental governance is regarded as one of the mechanisms available to government to realise the environmental right; Du Plessis 2010 *Stellenbosch Law Review* 266.

<sup>6</sup> Section 24 of the *Constitution of the Republic of South Africa, 1996* (the *Constitution*).

<sup>7</sup> A Category B municipality shares municipal executive and legislative authority in its area with a Category C municipality within whose area it falls; Section 155(1)(b) of the *Constitution*.

<sup>8</sup> Knysna Municipality date unknown <https://tinyurl.com/342kjbkb>.

Reserve in 2017.<sup>9</sup> Knysna has an Afro-temperate Forest along with marine and freshwater biomes, with the Knysna Estuary being both marine and freshwater in certain areas.<sup>10</sup>

The town of Knysna<sup>11</sup> lies within the Garden Route National Park Lakes Section with interconnected rivers, such as the Knysna, Salt, Bongani, and Bigai Rivers that all feed freshwater into the Knysna Estuary.<sup>12</sup> The main source of fresh water in the Knysna Estuary is the Knysna River catchment.<sup>13</sup> These rivers and streams originate from the Outeniqua Mountains.<sup>14</sup> Mission Blue, a well-known marine conservation organisation, declared the area between Buffalo Bay and Sparrebosch a so-called "Hope Spot".<sup>15</sup> The Knysna Hope Spot includes the Knysna Estuary, marine coastline, and offshore waters.<sup>16</sup>

In terms of conservation, the Knysna Estuary is considered South Africa's most important estuary.<sup>17</sup> It is a productive system that provides essential ecosystem services in the form of food and recreation for both human and aquatic life.<sup>18</sup> The combination of marine and freshwater biomes in the Knysna Estuary creates a salinity gradient, which is also called a river-estuary interface zone.<sup>19</sup> The upper estuary regime is connected to the Knysna River and has a lower salinity.<sup>20</sup> The

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<sup>9</sup> UNESCO 2019 <https://www.unesco.org/en/mab/garden-route>. See also Garden Route Biosphere Reserve date unknown <https://tinyurl.com/28twhrbz>.

<sup>10</sup> Joubert *The Distribution of the George, Knysna & Tsitsikamma Forests: Historical and Current* 4. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>11</sup> Note that Knysna is the town in which the Knysna Estuary is located, and the Knysna Municipality is not the town alone but encompasses a larger area; Knysna Municipality date unknown <https://tinyurl.com/342kjbkb/>.

<sup>12</sup> Visit Knysna date unknown <https://tinyurl.com/27wymkd4>. The area is designated as a Protected Environment in terms of the *National Environmental Management: Protected Areas Act* 57 of 2003 (*NEM:PAA*).

<sup>13</sup> Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report* 1.

<sup>14</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 3.

<sup>15</sup> Ocean Odyssey 2019 <https://www.oceanodyssey.co.za/knysnas-blue-heart>. Hope Spots are special places that are scientifically identified as critical to the health of the ocean.

<sup>16</sup> Mission Blue date unknown <https://missionblue.org/hope-spots>.

<sup>17</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 1. See also Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 1. The conservational importance is calculated based on weighted size, habitat, zonal type rarity and biodiversity importance scores; Turpie *et al* 2002 *Water SA* 199.

<sup>18</sup> Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report* 34.

<sup>19</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 13.

<sup>20</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

middle estuary regime acts as a transitional zone between the Knysna Estuary and the bay and has higher water temperatures and less freshwater influence.<sup>21</sup> The marine embayment regime, which is the opening to the ocean, flushes every tidal cycle and has the same characteristics as the adjacent Indian Ocean.<sup>22</sup> The salinity gradient is important for the functioning of the Knysna Estuary and gives it the desired ecosystem conditions for all the valuable biota.<sup>23</sup>

The Knysna Estuary contains an estimated 42 per cent of South Africa's estuarine biodiversity.<sup>24</sup> It is an essential breeding ground for up to 80 per cent of coastal fish species in the area.<sup>25</sup> The Knysna Estuary is also home to the Knysna seahorse, for example.<sup>26</sup> This seahorse's natural habitat is extremely limited in a geographical sense and, as such, is listed as endangered on the International Union for Conservation of Nature Red List of Threatened Species (IUCN's Red List).<sup>27</sup> Estuaries as a whole have been identified in the 2019 National Biodiversity Assessment Report as the most threatened and least protected ecosystems in South Africa, which emphasises the importance of efforts to protect the Knysna Estuary.<sup>28</sup>

The Knysna Estuary holds great socio-economic importance for the town's inhabitants.<sup>29</sup> For example, subsistence fishers in the area rely on it as a vital source of income.<sup>30</sup> The key economic driver in the Knysna area is tourism.<sup>31</sup> Knysna's tourism depends greatly on the amenity value of its environment, including the

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<sup>21</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>22</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>23</sup> Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report* 14. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 13. See also Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 260.

<sup>24</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 1.

<sup>25</sup> Mission Blue date unknown <https://missionblue.org/hope-spots>.

<sup>26</sup> The *Hippocampus capensis* is the world's only known estuarine seahorse and can only be found in the Keurbooms-, Knysna-, and Swartvlei Estuary.

<sup>27</sup> SANParks date unknown [https://www.sanparks.org/parks/garden\\_route/camps/knysna\\_lakes](https://www.sanparks.org/parks/garden_route/camps/knysna_lakes). The IUCN Red List founded in 1964, is the world's most comprehensive information source on the global conservation status of animal, fungi, and plant species; IUCN 2023 <https://www.iucnredlist.org/>.

<sup>28</sup> SANBI *National Biodiversity Assessment 2018: The status of South Africa's ecosystems and biodiversity* 2.

<sup>29</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 12.

<sup>30</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 137.

<sup>31</sup> Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report* VI.

Knysna Estuary, which is considered a key tourism attraction.<sup>32</sup> Estuaries in a healthy biological state have an increased amenity value, and a healthy estuary depends on the integrity of its ecosystem and flora.<sup>33</sup>

The Knysna Estuary is susceptible to anthropogenic activities in the catchment and coastline area, which people have historically exploited.<sup>34</sup> Some of the valuable ecosystem services in the Knysna Estuary are, for example, salt marshes and seagrass beds.<sup>35</sup> On the one hand, the salt marsh habitats hold high national conservation importance, and efforts should be made to conserve them as protected areas.<sup>36</sup> They act as natural filters for nutrient-rich runoff waters as well as contaminants like heavy metals that are detrimental to estuarine biota.<sup>37</sup> On the other hand, seagrass beds are considered some of the most important and productive ecosystems, as they are the habitats of endemic and threatened species such as the endangered Knysna seahorse.<sup>38</sup> The salt marshes and seagrass beds act as nurseries for invertebrates and juvenile fish, an important component of a healthy functioning estuary.<sup>39</sup> A variety of bird species also benefit from salt marshes and use them as an essential habitat.<sup>40</sup> The Knysna Estuary has lost significant amounts of salt marsh areas to developments such as roads and close adjacent houses.<sup>41</sup> Development has covered close to 20 per cent of the Knysna Estuary Functional Zone, also called the 5-metre contour line.<sup>42</sup> The developments are expected to continue impacting the salt marshes, and therefore the Knysna Estuary, well into the future.<sup>43</sup>

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<sup>32</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 134.

<sup>33</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 115.

<sup>34</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 115.

<sup>35</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 131.

<sup>36</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 8.

<sup>37</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 10 and 134.

<sup>38</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 132.

<sup>39</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 132.

<sup>40</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 132.

<sup>41</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 126. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 8.

<sup>42</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 6.

<sup>43</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 127. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 8.

The existing peripheral developments have created a barrier that prohibits the salt marshes from expanding in response to climate change-induced rising sea levels, an occurrence known as coastal squeeze.<sup>44</sup> Other anthropogenic activities that have an impact on the salt marshes include boating and fishing activities, all of which have been shown to contribute to the erosion of the salt marshes.<sup>45</sup> Boating activities in and around the Knysna Estuary also threaten the health and functioning of the seagrass beds.<sup>46</sup> The anchors and propellers of boats damage these vulnerable habitats.<sup>47</sup> Furthermore, boating activities have to some extent been responsible for introducing invasive alien species.<sup>48</sup> These issues are accompanied by the inadequate enforcement of boating, fishing, and bait collection restrictions.<sup>49</sup>

Moreover, the Knysna Estuary is experiencing major nutrient pollution due to discharge from the nearby wastewater treatment works into the Ashmead Channel.<sup>50</sup> Non-compliant discharges from the Knysna Waste Water Treatment Works (WWTW) have been causing eutrophication and nuisance macroalgal blooms, which have been attributed as the cause of losses of valuable seagrass beds and the overall negative impact on estuarine biota.<sup>51</sup> Stormwater runoff is also a threat to the biota of the Knysna Estuary.<sup>52</sup> Stormwater that flows from localised catchment areas has been carrying nutrient-rich effluent into the Knysna Estuary.<sup>53</sup> High e-coli levels are a recurring problem affecting the recreational and tourism value as well as the ecological health of the Knysna Estuary.<sup>54</sup> The Bongani River water quality is

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<sup>44</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 127. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 8.

<sup>45</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 131.

<sup>46</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 122.

<sup>47</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 10.

<sup>48</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 11. The invasive species commonly move locations either through the deliberate actions of humans or by clinging to boats.

<sup>49</sup> Western Cape Government *Report on Implementation of the Western Cape Estuarine Management Plan* 47.

<sup>50</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 118. Ashmead Channel is a protected arm of the estuary which surrounds Thesen Island.

<sup>51</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 7. See also Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 118.

<sup>52</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 8.

<sup>53</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 6.

<sup>54</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 6. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 13 and the Western Cape Government *Report on Implementation of the Western Cape Estuarine Management Plan* 55.

flagged as the poorest compared to other catchment areas such as the Salt and Bigai Rivers. All three rivers flow directly into the Estuary.<sup>55</sup> The Bongani River is considered a major nutrient polluter for the Knysna Estuary and rarely complies with set e-coli levels.<sup>56</sup> There has been a long record of inadequate management of the wastewater treatment works and stormwater management as well as an inability on the part of the Knysna Municipality to resolve the issues.<sup>57</sup>

At the time of writing, the Western Cape provincial government has laid criminal charges against the Knysna Municipality for contravening environmental legislation.<sup>58</sup> The criminal charges are reportedly for failing to implement directives issued by the Provincial Department of Local Government.<sup>59</sup> The result of non-implementation of these directives has caused serious degradation and pollution to the environment.<sup>60</sup> The directives were issued to the Municipality in an effort to force them into action to address service delivery problems.<sup>61</sup> These problems include sewage flowing into the Estuary, the waste disposal site bursting out of its seams, and a water crisis with no solution in sight.<sup>62</sup> Knysna Municipality has responded and denied that it has failed to implement the directives.<sup>63</sup> It is not yet clear what the outcome will be.

It follows that the Knysna Estuary is vulnerable to various environmental pressures and threats such as climate change, natural resource exploitation, alien invasive species, land-use change, infrastructure development, pollution, and freshwater inflow alterations.<sup>64</sup> Climate change and drought conditions are believed to have already altered the rainfall patterns, which in turn also affected the freshwater flow

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<sup>55</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 6.

<sup>56</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 6.

<sup>57</sup> Western Cape Government *Report on Implementation of the Western Cape Estuarine Management Plan* 47.

<sup>58</sup> Knysna-Plett Herald 2024 <https://tinyurl.com/2shxa5jd>.

<sup>59</sup> Knysna-Plett Herald 2024 <https://tinyurl.com/2shxa5jd>.

<sup>60</sup> Kriel 2024 <https://tinyurl.com/yx6zznzy>.

<sup>61</sup> Knysna-Plett Herald 2024 <https://tinyurl.com/2shxa5jd>.

<sup>62</sup> Knysna-Plett Herald 2024 <https://tinyurl.com/2shxa5jd>.

<sup>63</sup> Knysna-Plett Herald 2024 <https://tinyurl.com/2shxa5jd>.

<sup>64</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 1. See also Hayes *et al Knysna Estuary Management Plan: Situation Assessment Report* v.

to the Knysna Estuary.<sup>65</sup> Further reductions in freshwater flow threaten its ecological functioning.<sup>66</sup> According to Claassens *et al*, the ecological health of the Knysna Estuary is declining, suggesting minimal success from the conservation and management attempts thus far.<sup>67</sup>

The Knysna Estuary is publicly accessible and use thereof is largely unrestricted.<sup>68</sup> As an open-access common-pool resource it is prone to exploitation as it is difficult to control potential users, which often leads to unsustainable outcomes.<sup>69</sup> Nonetheless, the Knysna Estuary is under the management of South African National Parks (SANParks)<sup>70</sup> within South Africa's Garden Route National Park as referred to earlier.<sup>71</sup> As the conservation authority, SANParks has placed restrictions on resource use, such as bait collection and boating activities.<sup>72</sup> Furthermore, national restrictions on recreational and subsistence fishing are enforceable in the Knysna Estuary.<sup>73</sup> SANParks manages the activities on the Estuary but has no control over impacts such as pollution from the urban areas and drainage systems.<sup>74</sup> Therefore, there is no account in the current management strategy for any external negative influences on the Knysna Estuary.<sup>75</sup> While SANParks is the designated conservation authority, the surrounding localised catchments up to the mean spring high water mark fall under the jurisdiction of the Knysna Municipality.<sup>76</sup> Co-operation between SANParks and the Municipality and involvement from provincial authorities are vital for the successful management and conservation of the Knysna Estuary.<sup>77</sup>

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<sup>65</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 257. See also Claassens *et al* 2020 *African Journal of Aquatic Sciences* 14.

<sup>66</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 260.

<sup>67</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>68</sup> Claassens *et al* *African Journal of Aquatic Sciences* 1.

<sup>69</sup> Whitfield, Breen, and Read *Knysna Estuary - Jewel of the Garden Route* 279.

<sup>70</sup> SANParks is the leading national conservational authority in South Africa and is a public entity under the Department of Environmental Affairs' (DEA) jurisdiction, now known as the Department of Forestry, Fisheries and the Environment (DFFE); DFFE 2023 <https://www.dffe.gov.za/statutorybodies/sanparks>.

<sup>71</sup> Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report* iv.

<sup>72</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>73</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

<sup>74</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 278.

<sup>75</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 278.

<sup>76</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2

<sup>77</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 2.

Beyond co-operation, other proactive and creative efforts at local government level addressing some of the external influences may assist with the protection of the Knysna Estuary.<sup>78</sup>

In South Africa, a municipality is legally defined as an organ of state in the local sphere of government.<sup>79</sup> It exercises legislative and executive authority over an area of jurisdiction as determined by the *Local Government: Municipal Demarcation Act 27 of 1998 (Municipal Demarcation Act)*.<sup>80</sup> The functional areas are listed in schedules 4 Part B and 5 Part B of the *Constitution*.<sup>81</sup> A local municipality such as Knysna is a Category B municipality, and as such it shares executive and legislative authority with a Category C municipality.<sup>82</sup>

South African municipalities have a constitutional mandate to promote social and economic development, known as their developmental mandate.<sup>83</sup> Furthermore, they have a constitutional and statutory duty to protect the environment.<sup>84</sup> This duty is entrenched in the *Constitution* which states that one of the objects of local government is "to promote a safe and healthy environment", an object that directly aligns with the governmental duties that emanate from the constitutional environmental right in section 24.<sup>85</sup> The *National Environmental Management Act 107 of 1998 (NEMA)* defines the environment as "the surroundings within which humans exist...".<sup>86</sup> In the case of *BP Southern Africa (Pty) Ltd v MEC for Agriculture,*

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<sup>78</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 280.

<sup>79</sup> Section 2(a) of the *Municipal Systems Act*.

<sup>80</sup> Section 2(a) of the *Municipal Systems Act*.

<sup>81</sup> Section 156(1)(a) of the *Constitution*.

<sup>82</sup> Section 155(1)(b) of the *Constitution*. A Category C municipality has municipal executive and legislative authority in an area that includes more than one municipality. The Garden Route District Municipality is the Category C municipality for Knysna.

<sup>83</sup> Sections 152(a)(c) and 153(a) of the *Constitution*.

<sup>84</sup> Sections 7(2), 24 and 152(d) of the *Constitution*. De Villiers, Van As and Botha 2020 *Stellenbosch Law Review* 321. See also Du Plessis 2015 *PER* 1856.

<sup>85</sup> Section 152 of the *Constitution*.

<sup>86</sup> The environment is defined as the surroundings in which humans exist and are made up of the land, water and atmosphere of the earth as well as the micro-organisms, plant, and animal life; section 1 of the *NEMA*.

*Conservation, Environment and Land Affairs* (the *BP* case),<sup>87</sup> the Court added to the definition of "environment" and stated:

...the broad definition of "environment" would include all conditions and influences affecting the life and habits of man, which would also include socio-economic conditions and influences.<sup>88</sup>

The Knysna Estuary is an important socio-economic asset to the people of Knysna and is a central part of the local environment.<sup>89</sup> Thus, the Estuary falls within the purview of the environment, as a surrounding in which humans exist, and a socio-economic influence.

Municipalities also have the legal mandate and powers to execute certain environmental duties.<sup>90</sup> Municipalities presumably have the necessary governing authority and access to governance instruments to do what is necessary to achieve the environmental goals set out in South Africa's *Constitution* and legislation, which will be discussed later in this study.<sup>91</sup>

The notion of "local environmental governance" (LEG) refers to the environmentally relevant outputs and processes conducted at a strategic, tactical, and operational level in municipalities.<sup>92</sup> LEG centres around the development, adoption, and use of local environmental management and governance instruments.<sup>93</sup> These instruments are expected to help municipalities achieve their objectives as set in law, including environmental law.<sup>94</sup>

South Africa's framework of local government and environmental laws requires municipalities to develop and adopt several instruments that are aimed at achieving LEG objectives.<sup>95</sup> Examples of the legally prescribed instruments are the Integrated Development Plan (IDP), municipal budgets, and service delivery and budget

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<sup>87</sup> 2004 5 SA 124 (W).

<sup>88</sup> The *BP* case para 150. See also Feris 2008 *SAJHR* 40.

<sup>89</sup> Whitfield, Breen and Read *Knysna Estuary - Jewel of the Garden Route* 12.

<sup>90</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-6.

<sup>91</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-6.

<sup>92</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>93</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>94</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>95</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

implementation plans (SDBIPs).<sup>96</sup> There are also some instruments that can be innovatively adopted to achieve LEG objectives.<sup>97</sup> Examples of these include municipal by-laws and community participation, which municipalities can wield in terms of the *Constitution*, local government law, and environmental law to achieve LEG objectives.<sup>98</sup>

The successful use of LEG instruments depends on a municipality's ability and political will to choose appropriate instruments or combinations thereof, and use them to their full potential.<sup>99</sup> Local government scholars have identified a combination of LEG instruments that may enable municipalities to meet environmental obligations if used to their full potential.<sup>100</sup> Thus, these instruments could also be used to fulfil local government's role in the management of their environments and, by extension, an estuary.

The LEG instruments discussed in this study are predominantly environmental management and governance instruments and have the potential to achieve sustainability outcomes.<sup>101</sup> The instruments allow for the regulation of municipalities' internal activities and the area under their jurisdiction.<sup>102</sup> The LEG instruments in the set are the IDP, municipal budget, SDBIP, municipal by-laws, public participation, section 79 and 80 committees, and ward committees.<sup>103</sup>

The argument advanced in this study is premised on the understanding that the set of LEG instruments is able to realise the environmental objectives, and thus well-suited to advance municipalities' ability to contribute to estuary management.

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<sup>96</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

<sup>97</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>98</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-50.

<sup>99</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

<sup>100</sup> SARChI CLES Chair 2022 <https://law.nwu.ac.za/sarchi-cles-chair/environmental-governance-tools-municipalities-south-africa>. See also Du Plessis 2010 *Stellenbosch Law Review* 285.

<sup>101</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-3.

<sup>102</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-32 to 3-23. See also Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-38.

<sup>103</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

Against the above background, this study is scoped to explore the extent to which a specific set of LEG instruments enables or could enable the Knysna Municipality to contribute to the management of the Knysna Estuary.

### ***1.2 Research question***

In light of the above, the researcher intends to determine to what extent the Knysna Municipality's LEG instruments as provided for in law are utilised or could be utilised to contribute to the management of the Knysna Estuary.

### ***1.3 Research objectives***

The main objective of this study is to provide a critical review of some of Knysna Municipality's existing LEG instruments to determine whether and how they are or could be utilised to contribute to the management of the Knysna Estuary.

The main objective is addressed along the lines of the following subsidiary objectives:

- a) To reflect on local government's role in estuarine management;
- b) To distil the principles, objectives and duties from the *Constitution* and the relevant statutory framework concerning local government's contribution to estuarine management;
- c) To distil and discuss the set of LEG instruments provided for in South African law that could be utilised for a municipality's contribution to estuarine management;
- d) To critically review specific relevant LEG instruments of the Knysna Municipality and determine whether and how these instruments are used to contribute to the management of the Knysna Estuary; and
- e) To conclude the study with recommendations relevant to the Knysna Municipality's use of its LEG instruments to advance contribution to the management of the Knysna Estuary.

## ***1.4 Research methodology***

The study is founded in law and makes use of the desk-based research method. Some of the primary legal sources include the *Constitution*, local government framework law, framework national environmental law, and sectoral environmental law. Provincial environmental law from the Western Cape is also consulted as Knysna is located within this province. Primary and secondary legal sources are consulted, mostly from South Africa.

The study centres around an estuary as an ecological and biological environmental asset. To better comprehend the ecological functioning of estuaries, sources from the scientific sphere on these disciplines, such as journal articles and books, are also consulted. The legal dimension of the research is also fortified by a reading of authorities on other non-legal aspects such as environmental management, local governance, and estuarine management.

Furthermore, public information from SANParks as well as literature on the conservation and biodiversity of the Knysna Estuary are consulted.<sup>104</sup> The study further relies on open-source web-based documents as regulated by section 21A of the *Local Government: Municipal Systems Act 32 of 2000 (Municipal Systems Act)* for its review of the Knysna Municipality's LEG instruments. It should be noted that this study did not involve any empirical research due to resource and time constraints.

The study focuses on the Knysna Estuary in the jurisdiction of the Knysna Municipality as a case study. However, the findings of this study may be applicable to other municipalities which also have an estuary of significance in their area of jurisdiction.

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<sup>104</sup> The Knysna Basin Project is an NGO based in Knysna which focuses on coastal system research. <https://knysnabasinproject.co.za/>. Whitfield, Breen and Read are authors affiliated with the Knysna Basin Project, and the book *Knysna Estuary - Jewel of the Garden Route*, was written based on the Knysna Basin Project's extensive research of the Knysna Estuary.

### ***1.5 Study outline***

Chapter two examines the *Constitution*, local government framework law, framework national environmental law, sectoral environmental law, and provincial environmental law to reflect on local government's role in estuarine management. Furthermore, this chapter distils the principles, objectives and duties from the *Constitution* and the relevant statutory framework on the environment and local government insofar as local government contribution to estuarine management is concerned.

Chapter three distils the set of LEG instruments as provided for in local government legislation while also investigating the extent to which they could be utilised for municipal contribution to estuarine management.

Chapter four provides an overview and critical review of relevant Knysna Municipality LEG instruments to determine whether and how they are used to contribute to the management of the Knysna Estuary. The IDP, municipal budget, SDBIP, municipal by-laws, public participation, section 79 and 80 committees, and ward committees are reviewed with reference to the applicable principles, objectives, and duties of local government concerning estuarine management.

Lastly, chapter five concludes the study and provides recommendations on using the LEG instruments to advance municipal contribution to the management of the Knysna Estuary. This chapter also makes suggestions for future improvement of estuarine management in the area and reflects on the remaining knowledge gaps.

## CHAPTER 2      LOCAL GOVERNMENT'S ROLE IN ESTUARINE MANAGEMENT IN SOUTH AFRICA

### *2.1 Introduction*

Estuarine management is complex.<sup>105</sup> Marine, terrestrial and riverine ecosystems influence estuaries and require integrated cross-sectoral planning and management.<sup>106</sup> Environmental legislation usually defines the principles, norms, and standards for which sector-specific areas relevant to an estuary are managed, conserved, and protected.<sup>107</sup> The *Constitution* assigns executive, regulatory, administrative, and service provision roles, responsibilities, and functions to the three spheres of government, which have implications for environmental management.<sup>108</sup> Local government has a role in environmental management as a front-line regulator and provider of services.<sup>109</sup>

This chapter aims to reflect on local government's role in estuarine management by examining the *Constitution*, local government framework law, framework national environmental law, sectoral environmental law, and provincial environmental law as relevant to estuarine management and local government in South Africa. Furthermore, this chapter aims to distil the principles, objectives, and duties from the *Constitution* and statutory framework relevant to local government contribution to managing estuaries. The discussion on the application of provincial law focuses only on the Western Cape Province since this is where Knysna is geographically situated.

The first part of the chapter starts with an introductory background from the *Constitution* and explores a municipality's general constitutional environmental mandate relevant to estuary management. The second part of the chapter is devoted to an exposition of the national and provincial environmental framework

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<sup>105</sup> GN 341 in GG 36432 of 10 May 2013.

<sup>106</sup> GN 341 in GG 36432 of 10 May 2013.

<sup>107</sup> Glazewski *Environmental Law in South Africa* 10-45.

<sup>108</sup> Mngoma, Pillay and Reddy *African Journal of Public Affairs* 108.

<sup>109</sup> Mngoma, Pillay and Reddy *African Journal of Public Affairs* 108.

laws applicable to estuaries. Finally, sectoral national and provincial laws applicable to estuaries are discussed. The discussion in this chapter will reflect on the norms and standards of environmental management applicable to local government, with the purpose of contextualising local government's role in estuarine management.

Finally, this chapter concludes with a consolidation of municipal principles, objectives, and duties feeding into local government's contribution to estuarine management. This will subsequently be used in conjunction with the LEG instruments discussed in chapter three to provide an evaluation of the state of affairs in the Knysna Municipality in chapter four.

## ***2.2 Constitutional law perspectives on estuarine management***

The *Constitution* contains sections directly and indirectly relevant to environmental management and governance.<sup>110</sup> Section 24, for example, provides the power and mandate for environmental governance.<sup>111</sup> Section 27 provides a right of access to healthcare, food, water, and social security, which, to some extent, are dependent on environmental management and governance.<sup>112</sup> Other sections prescribe government functions and powers that establish local government's role in the management of an estuary. Section 24 of 27 of the Constitution contains the fundamental rights in the Bill of Rights, and the state must respect, protect, promote, and fulfil all the entitlements provided by them.<sup>113</sup> This obligation extends to local government as an organ of state.<sup>114</sup>

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<sup>110</sup> This includes sections 24, 27, 152, 156 and schedules 4 and 5, which will be discussed at a later stage in this chapter; see paras 2.2.2, 2.2.3.1 and 2.2.3.3. See also Du Plessis "Understanding the Legal Context" 12.

<sup>111</sup> Lubbe *An Analysis of the Environmental Law Framework Regulating Cross-border Biodiversity Conservation in the Maloti-Drakensberg Transfrontier Park* 32.

<sup>112</sup> De Vos *et al South African Constitutional Law in Context* 667. See also Currie and De Waal *The Bill of Rights Handbook* 567.

<sup>113</sup> Sections 7(2) and 8(1) of the *Constitution*

<sup>114</sup> Section 239 of the *Constitution*. See also Currie and De Waal *The Bill of Rights Handbook* 521.

### 2.2.1 Section 24

Estuaries form part of the environment and are also included in the scope of legal protection of section 24.<sup>115</sup> It establishes a substantive enforceable environmental right protecting human health and well-being, and human interest in the environment.<sup>116</sup> The environmental right imposes a duty on the state to take reasonable legislative and other measures towards its realisation.<sup>117</sup> Since this is a fundamental right, local government is co-responsible with national and provincial governments for its realisation.<sup>118</sup>

To quote section 24 of the *Constitution*:

Everyone has the right—  
(a) to an environment that is not harmful to their health or well-being; and  
(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—  
(i) prevent pollution and ecological degradation;  
(ii) promote conservation; and  
(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.<sup>119</sup>

Realising the environmental right takes the form of preventing pollution and ecological degradation, promoting conservation, securing ecologically sustainable development, and using natural resources sustainably.<sup>120</sup> Section 24(b) acts as an internal modifier to section 24(a) and sets out how it should be realised.<sup>121</sup> Section 24(a) enshrines the entitlement that a person should be protected from third-person activities that unlawfully interfere with their health and well-being.<sup>122</sup> Section 24(b) places a duty on the state to regulate in a way that helps environmental protection

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<sup>115</sup> Section 1 of the *NEMA*. Hayes *et al Knysna Estuary Management Plan: Situation Assessment Report* 78.

<sup>116</sup> Rautenbach and Venter *Rautenbach - Malherbe Constitutional Law* 419. See also De Vos *et al South African Constitutional Law in Context* 667 and Du Plessis 2010 *Stellenbosch Law Review* 266.

<sup>117</sup> Sections 239 and 24(b) of the *Constitution*. See also De Vos *et al South African Constitutional Law in Context* 668.

<sup>118</sup> Du Plessis 2010 *Stellenbosch Law Review* 266.

<sup>119</sup> Section 24 of the *Constitution*.

<sup>120</sup> Section 24(b) of the *Constitution*.

<sup>121</sup> Kidd 2023 *PER* 16.

<sup>122</sup> Feris and Fuo "Environmental Rights Protected in the Constitution" 6-8.

and sustainable development.<sup>123</sup> Consequently, local government (as an organ of state) is given both positive and negative obligations, where the negative obligation suggests respecting the existing exercise of the right and refraining from interfering.<sup>124</sup> The positive obligation suggests actively protecting and fulfilling the right, and the state must take action and expend resources to do so.<sup>125</sup>

The interpretation of section 24 has uncovered some questions.<sup>126</sup> Providing the right is available to "everyone" raises the question of whether this is only available to humans or extends to animals and inanimate objects.<sup>127</sup> Two available approaches to interpreting the environmental right are anthropocentrism and biocentrism.<sup>128</sup> Anthropocentrism places human interest at the centre, while biocentrism gives non-human living organisms inherent value.<sup>129</sup> Be that as it may, the Bill of Rights does not go so far as to extend these rights to animals and inanimate objects.<sup>130</sup> This is confirmed in the *NEMA*, which states that people and their needs must be placed at the forefront of environmental management.<sup>131</sup> Humans are placed as a central component of the environment, and thus their interests seem to be the driving force for preserving the environment.<sup>132</sup> Still, the conservation and protection of the environment are inherently related to the health and well-being of humans, and their quality of life.<sup>133</sup>

Notably, "health and well-being" are fundamental to the intention of section 24, but not synonymous. "Health" has been understood to be human mental and physical integrity.<sup>134</sup> Having an environment not harmful to one's health is particularly significant for socio-economically challenged groups who rely on the environment

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<sup>123</sup> Feris and Fuo "Environmental Rights Protected in the Constitution" 6-8.

<sup>124</sup> Glazewski *Environmental Law in South Africa* 7-29. See also Boyd *The Environmental Rights Revolution* 23.

<sup>125</sup> Glazewski *Environmental Law in South Africa* 7-30. See also Boyd *The Environmental Rights Revolution* 23.

<sup>126</sup> Glazewski *Environmental Law in South Africa* 5-11.

<sup>127</sup> Glazewski *Environmental Law in South Africa* 5-11.

<sup>128</sup> Glazewski *Environmental Law in South Africa* 1-8.

<sup>129</sup> Glazewski *Environmental Law in South Africa* 1-9. See also Feris 2008 *SAJHR* 32.

<sup>130</sup> Glazewski *Environmental Law in South Africa* 5-11.

<sup>131</sup> Section 2(2) of the *NEMA*.

<sup>132</sup> Glazewski *Environmental Law in South Africa* 1-9. See also Feris 2008 *SAJHR* 30.

<sup>133</sup> Feris 2008 *SAJHR* 49.

<sup>134</sup> Currie and De Waal *The Bill of Rights Handbook* 526.

for basic needs such as food and water.<sup>135</sup> "Well-being", on the other hand, is far more disputed. Generally, it has been understood that for "well-being" to be affected it would not need to amount to mental or physical damage but cannot mean emotional insecurity or aesthetic discomfort.<sup>136</sup> A person's well-being may be impacted by their reasonable anticipation of a threat to the environment.<sup>137</sup> Thus, the protection of environmental integrity forms part of human well-being.<sup>138</sup> Without "well-being" the right would not necessarily cover concerns such as the conservation of an estuary or the protection of its biodiversity, and the interests of conservation would not be readily included in section 24(a).<sup>139</sup> Yet, social and economic development is also essential for human well-being.<sup>140</sup>

The *Constitution* recognises that protecting the environment and the need for social and economic development go hand in hand.<sup>141</sup> Section 24(b)(iii) creates the idea that environmental and socio-economic considerations will find balance through sustainable development.<sup>142</sup> The Court in the *Fuel Retailers* case said:

The essence of sustainable development is balanced integration of socio-economic development and environmental priorities and norms.<sup>143</sup>

Thus, sustainable development is at the core of environmental protection.<sup>144</sup> Despite sustainable development aiming to balance economic growth, social equity, and environmental protection, these elements often conflict in practice and require compromises to be made.<sup>145</sup> The historical trajectory of economic growth versus

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<sup>135</sup> Currie and De Waal *The Bill of Rights Handbook* 526.

<sup>136</sup> Currie and De Waal *The Bill of Rights Handbook* 526. See also Du Plessis 2018 *SAJHR* 199.

<sup>137</sup> Du Plessis 2018 *SAJHR* 199.

<sup>138</sup> Du Plessis 2018 *SAJHR* 199.

<sup>139</sup> Currie and De Waal *The Bill of Rights Handbook* 526.

<sup>140</sup> *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* 2007 ZACC 13 (*Fuel Retailers* case) para 44.

<sup>141</sup> *Fuel Retailers* case para 45.

<sup>142</sup> *Fuel Retailers* case para 45.

<sup>143</sup> *Fuel Retailers* case para 113.

<sup>144</sup> *Fuel Retailers* case para 45.

<sup>145</sup> Field "Local Economic Development and the Pursuit of a Green Economy" 5-13.

ecological degradation shows the economic pillar substantially overshadows social equity and the environment.<sup>146</sup>

Chikuruwo argues that section 24(b)(iii)'s interpretation does not lend itself to mean sustainable development, but ecologically sustainable development.<sup>147</sup> Adding the adjective "ecologically" to sustainable development motivates preserving Earth's ecological systems.<sup>148</sup> The interpretation of development in section 24(b)(iii) should shift from preferencing economic growth to one that preferences environmental interests.<sup>149</sup> Thus, the aim should not be to sustain development but to sustain the earth's ecology.<sup>150</sup> Ecologically sustainable development can enhance human well-being through preserving the earth's ecological systems.<sup>151</sup>

From the above discussion, the Knysna Estuary's ecological and economic value makes it, as a matter of principle, worthy of legal protection.<sup>152</sup> As an organ of state, local government must respect, promote, and fulfil the rights in the Bill of Rights.<sup>153</sup> Local government must consider the balance between protecting the environment and the social and economic interests in the environment when respecting, promoting or fulfilling these rights.<sup>154</sup> Section 24 indicates that preserving ecological systems may be the key to maintaining this balance.<sup>155</sup> This is an especially important consideration when dealing with a vulnerable estuarine system which doubles as a socio-economic asset.<sup>156</sup>

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<sup>146</sup> Field "Local Economic Development and the Pursuit of a Green Economy" 5-13.

<sup>147</sup> Chikuruwo 2024 *SAYIL* 3.

<sup>148</sup> Chikuruwo 2024 *SAYIL* 3.

<sup>149</sup> Chikuruwo 2024 *SAYIL* 23.

<sup>150</sup> Chikuruwo 2024 *SAYIL* 24.

<sup>151</sup> Chikuruwo 2024 *SAYIL* 24.

<sup>152</sup> Currie and De Waal *The Bill of Rights Handbook* 526.

<sup>153</sup> Sections 8(1) and 7(2) of the *Constitution*.

<sup>154</sup> Section 24(b)(iii) of the *Constitution*; Paterson 2018 *PER* 29. See also Chikuruwo 2024 *SAYIL* 23.

<sup>155</sup> Section 24 of the *Constitution*.

<sup>156</sup> Hayes *et al Knysna Estuary Management Plan: Situation Assessment Report* 78. See para 1.1 above.

### 2.2.2 Section 27

Section 27 provides people's right to access to sufficient food and water.<sup>157</sup> As mentioned in chapter one, the Knysna Estuary has a salinity gradient which makes its water unconsumable in its raw state.<sup>158</sup> The notion of "sufficient" water has been interpreted to mean water fit for household use and human consumption.<sup>159</sup> Therefore, section 27 does not apply to the Knysna Estuary as a body of water. However, the Knysna Estuary is also a source of food and income for subsistence fishers and the tourism industry in Knysna.<sup>160</sup> Their right to sufficient food is linked to their environmental right, as their activities rely on the ecological function of the Knysna Estuary to be unharmed.<sup>161</sup>

The obligation to realise section 27 rights is not without limits. The rights in the Bill of Rights are all limited by section 36.<sup>162</sup> Section 27 does not impose an obligation on the state to provide for an unencumbered right to water.<sup>163</sup> The state only has to create the conditions and opportunities to facilitate access to food and water.<sup>164</sup> Section 27 contains a progressive realisation clause.<sup>165</sup> Providing access to food and water depends on the state's legislative and administrative capacity.<sup>166</sup>

Section 27(2) states:

The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.

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<sup>157</sup> Section 27(1)(b) of the *Constitution*.

<sup>158</sup> See para 1.1.

<sup>159</sup> Feris and Fuo "Environmental Rights Protected in the Constitution" 6-8.

<sup>160</sup> See para 1.1.

<sup>161</sup> See para 2.2.1.

<sup>162</sup> Section 7(2) of the *Constitution*.

<sup>163</sup> *City of Johannesburg v Mazibuko* 2009 ZACC para 28 (the *Mazibuko* case), *Government of the Republic of South Africa v Grootboom* 2000 ZACC para 19 (the *Grootboom* case), *Minister of Health v Treatment Action Campaign* 2002 ZACC para 15 (the *Treatment Action Campaign* case).

<sup>164</sup> Feris and Fuo "Environmental Rights Protected in the Constitution" 6-8.

<sup>165</sup> Kidd 2023 *PER* 10. Progressive realisation implies that the full realisation of economic, social, and cultural rights will generally not be achieved in the short term.

<sup>166</sup> Section 27(2) of the *Constitution*. See also The *Mazibuko* case para 28, the *Grootboom* case para 19, and the *Treatment Action Campaign* case para 15.

As a progressively realisable right, section 27 is often accompanied by the provision of infrastructure, and is thus dependent on the available resources.<sup>167</sup> Providing the appropriate infrastructure falls in line with local government's developmental duty in terms of the *Constitution*.<sup>168</sup> However, the section providing for local governments' developmental duty only speaks to a community's social and economic development and not the ecological component.<sup>169</sup> Be that as it may, "within available resources" is conceptually the same as "to the maximum of its available resources" indicating that a balance must be upheld between maximising the resources and ensuring the sustainability of those resources.<sup>170</sup> Reading section 27 with section 24 shows that local government is mandated to ensure that water as a resource is protected and conserved, but also that access to water is provided.<sup>171</sup>

The Knysna Estuary's main source of freshwater is the Knysna River, which is also a source of water for the town.<sup>172</sup> Yet, the Knysna Estuary is in a vulnerable state and any more reductions in freshwater inflow may exacerbate its decline in ecological function.<sup>173</sup> The Knysna Municipality must balance providing water to the town and ensuring that the Knysna Estuary's ecological function is not jeopardised.

### *2.2.3 The governance arrangements in the Constitution*

The *Constitution* not only provides rights but also guides the administrative organisation of the three spheres of government.<sup>174</sup> It provides the spheres of government with the necessary legislative and executive authority to perform their functions and thereby enables the realisation of the above-mentioned rights.<sup>175</sup>

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<sup>167</sup> Kidd 2023 *PER* 15.

<sup>168</sup> Section 153(a) of the *Constitution*. Field "Local Economic Development and the Pursuit of a Green Economy" 5-8.

<sup>169</sup> Sections 153, 27 and 24 of the *Constitution*.

<sup>170</sup> McLaren 2016 *Policy Brief* 1.

<sup>171</sup> Feris and Fuo "Environmental Rights Protected in the Constitution" 6-8.

<sup>172</sup> See para 1.1. See also Knysna Municipality 2023 *Integrated Development Plan* 42.

<sup>173</sup> See para 1.1.

<sup>174</sup> Sithomola 2022 *Administratio Publica* 22.

<sup>175</sup> Du Plessis "Understanding the Legal Context" 11.

### 2.2.3.1 Local government's role in environmental management

The term "government" constitutes national, provincial, and local spheres of government that the *Constitution* prescribes as distinctive, interdependent, and interrelated.<sup>176</sup> The *Constitution* delegates respective executive and administrative authority to the different spheres of government and provides them with the autonomy to exercise that authority without interference from the other spheres.<sup>177</sup>

Municipalities, such as Knysna Municipality, are in the local government sphere.<sup>178</sup> Local government may not perform functions and powers for which they do not have authority unless the *Constitution* or national or provincial legislation bequeaths it upon them.<sup>179</sup> The major functional areas applicable to the broader environment and natural resource protection are set out in schedules 4A and 5A of the *Constitution* which means they fall under the competency of national and provincial legislative authority.<sup>180</sup> These areas include, for example, the environment, conservation, and pollution control.<sup>181</sup> Notably, local government is not given any authority to manage the environment or an estuary specifically.<sup>182</sup>

Yet it is one of the constitutional objects of local government to promote a safe and healthy environment, despite "environment" not being listed as a functional area of local government competence.<sup>183</sup> To promote a safe and healthy environment, a municipality must use its administrative and financial authority within the confines of the law.<sup>184</sup> The administration, budgeting and planning processes a municipality performs must prioritise the basic needs of the community.<sup>185</sup>

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<sup>176</sup> Section 40 of the *Constitution*.

<sup>177</sup> Sections 104, 125 and 156 of the *Constitution*. Paterson 2018 *PER* 19.

<sup>178</sup> Section 151(1) of the *Constitution*.

<sup>179</sup> Sections 156(2) and 41(1)(g) of the *Constitution*.

<sup>180</sup> Schedules 4A and 5A of the *Constitution*.

<sup>181</sup> Schedules 4A and 5A of the *Constitution*. See also Paterson 2018 *PER* 14.

<sup>182</sup> *Abbott v Overstrand Municipality* 2016 ZASCA 68 (the *Abbott ZASCA* case) para 15. See also Schedules 4 and 5 of the *Constitution*.

<sup>183</sup> Sections 152(1)(d), 104 and schedule 4A of the *Constitution*.

<sup>184</sup> Section 152(2) of the *Constitution*.

<sup>185</sup> Section 153(a) of the *Constitution*.

It is possible for the administration of matters in schedules 4A and 5A to be assigned to municipalities with the necessary capacity if it would mean the matter would be efficiently administered.<sup>186</sup> Likewise, national and provincial governments may exercise legislative authority over any matter set out in schedules 4 and 5, including local government matters.<sup>187</sup> The possibility exists for both to encroach on the functional areas of the other if the situation calls for it.<sup>188</sup> The Court confirmed this notion in the *Nel v Hessequa Local Municipality* case (the *Nel* case).<sup>189</sup>

In the *Nel* case, the applicant approached the Court to have the municipal by-laws relating to the management and use of rivers passed by the Hessequa Local Municipality declared unconstitutional.<sup>190</sup> These by-laws made provision for the licensing of boats on the rivers, as well as regulated a list of boating activities.<sup>191</sup> Furthermore, these by-laws authorised officers to investigate, test, and remove boats from the rivers.<sup>192</sup> The applicant argued that the adopted by-laws contradicted the *Constitution* and national legislation, and were invalid.<sup>193</sup> The basis for this argument was that municipalities do not have the power to legislate on the use of rivers and the powers awarded to the officers were a violation of the right to privacy and the requirement to have the boat licenced violated the *National Water Act* 36 of 1998 (the *NWA*) which allows a person with lawful access to a water resource to use it for recreational purposes.<sup>194</sup> The Court dismissed the application and held that the applicants had failed to make a case that the by-laws were unconstitutional or invalid.<sup>195</sup> The reasoning for this was because of the interpretation of section 156 of the *Constitution* along with schedules 4B and 5B, which give municipalities administrative power over rivers as they fall within the schedule 5B listed local government matters, namely local amenities, municipal recreation and public

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<sup>186</sup> Section 156(4) of the *Constitution*.

<sup>187</sup> Sections 44(1)(a)(ii) and 104(1)(b) of the *Constitution*.

<sup>188</sup> Section 156(4) and 44(1)(a)(ii) of the *Constitution*.

<sup>189</sup> *Nel v Hessequa Local Municipality* 2015 ZAWCHC case number 12576/2013.

<sup>190</sup> *Nel* case para 1.

<sup>191</sup> *Nel* case para 5; Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 72.

<sup>192</sup> *Nel* case para 7.

<sup>193</sup> *Nel* case para 2; Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 74.

<sup>194</sup> *Nel* case para 2; Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 74.

<sup>195</sup> *Nel* case para 36.

spaces.<sup>196</sup> The *Ne/* case shows the constitutional demand for developmental local government and indicates that as section 156(5) prescribes, a municipality which has the resources can legislate and administer matters listed in schedules 4A and 5A if it promotes the objective of section 24.<sup>197</sup> Thus, the possibility exists for local government to have administrative power over an estuary as well.

However, the local government sphere has been viewed as the "weaker" sphere of government and often lacks the capacity to exercise its legislative and executive powers.<sup>198</sup> As such, the *Constitution* specifies that the manner in which local government exercises its powers and functions must be monitored, supported, and regulated by national and provincial governments.<sup>199</sup> The national and provincial government is effectively assigned a supervisory role over local government performing its functions and powers.<sup>200</sup> It is, however, also important that local government's right and ability to perform its powers and functions are not impeded by national and provincial governments.<sup>201</sup> Instead, national and provincial governments are supposed to support and strengthen the capacity of local government to manage their own affairs and municipalities must be granted the executive authority to ensure the effective performance of their functions.<sup>202</sup> It is therefore paramount that the three spheres of government work together according to the principles of co-operative governance.<sup>203</sup> Moreover, municipalities' role in environmental management must be viewed with co-operative governance between the spheres of government in mind.<sup>204</sup>

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<sup>196</sup> *Ne/* case para 11; Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 74.

<sup>197</sup> Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 7.

<sup>198</sup> De Vos *et al South African Constitutional Law in Context* 301.

<sup>199</sup> Section 155(6)(a) of the *Constitution*. See also De Vos *et al South African Constitutional Law in Context* 301.

<sup>200</sup> De Vos *et al South African Constitutional Law in Context* 301.

<sup>201</sup> Section 151 of the *Constitution*. See also Fuo 2017 *De Jure* 327.

<sup>202</sup> Sections 154(1), 155(6)(b), and 155(7) of the *Constitution*. See also Paterson 2018 *PER* 19.

<sup>203</sup> Section 41 of the *Constitution*. See also Fuo 2017 *De Jure* 327.

<sup>204</sup> Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 8.

### 2.2.3.2 Co-operative governance involving the spheres of government

The *Constitution* mandates co-operative governance in Chapter 3.<sup>205</sup> All spheres of government must observe and adhere to the principles of co-operative governance.<sup>206</sup> The principles require the spheres of government to provide effective, transparent, accountable and coherent governance.<sup>207</sup> These principles are also referred to as principles of good governance.<sup>208</sup> The principles furthermore mandate all spheres of governance to co-operate in mutual trust and good faith by assisting and supporting each other.<sup>209</sup> The spheres should inform one another on matters of common interest and co-ordinate their actions accordingly.<sup>210</sup> Moreover, the spheres are encouraged to make and administer laws in co-operation with each other.<sup>211</sup>

It is specifically provided that the spheres of government must respect the constitutional status, powers, and functions of other spheres of government.<sup>212</sup> Spheres of government are not allowed to assume any power or function not assigned to them by the *Constitution*, and they may not perform those functions and powers in a way that infringes on the geographical, functional or institutional integrity of government in another sphere.<sup>213</sup> The spheres of government may not disturb each other's autonomy to exercise their functions.<sup>214</sup> Thus, local government should not intrude on the other spheres' autonomy to manage an estuary.

However, powers allocated to the separate spheres of government are not completely independent of each other, and an overlap is bound to happen, and when it does, co-operative governance will be vital.<sup>215</sup> The Constitutional Court in *Maccsand v the City of Cape Town* (*Maccsand* case) considered this overlap and

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<sup>205</sup> Chapter 3 of the *Constitution*.

<sup>206</sup> Sections 40 and 41(1)(c) of the *Constitution*.

<sup>207</sup> Section 41(1)(c) of the *Constitution*.

<sup>208</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 7.

<sup>209</sup> Section 41(1)(h) of the *Constitution*.

<sup>210</sup> Section 41(1)(h) of the *Constitution*.

<sup>211</sup> Du Plessis "Understanding the Legal Context" 12.

<sup>212</sup> Section 41(1)(e) of the *Constitution*.

<sup>213</sup> Sections 41(1)(f) and (g) of the *Constitution*.

<sup>214</sup> Section 155(6)(b) of the *Constitution*. See also Paterson 2018 *PER* 19.

<sup>215</sup> Paterson 2018 *PER* 20.

decided that it does not equate to an intrusion on the functional area of the other, but that they will be exercising their individual competency in co-operation with one another.<sup>216</sup>

Co-operative governance is an important ingredient for the co-responsible realisation of section 24, as is seen in *Le Sueur v eThekweni Municipality* (*Le Sueur* case).<sup>217</sup> *Le Sueur*, the first applicant, approached the Court to declare certain resolutions the eThekweni Municipality adopted that would affect their properties as unconstitutional.<sup>218</sup> Some of these resolutions upgraded the legal status of the Durban Municipality Open Space Systems (D-MOSS), which is a management plan protecting biodiversity and ecosystem services in the municipal area.<sup>219</sup> The implication was that private property owners were not allowed to develop without environmental authorisation support from the Environmental Planning and Climate Protection Department of the eThekweni Municipality.<sup>220</sup> *Le Sueur* argued that the "environment" is a functional area of national and provincial government, which excludes local government from exercising legislative or executive authority over such matters.<sup>221</sup> The Court dismissed the application and held that municipalities are allowed to legislate for environmental matters in order to protect the environment.<sup>222</sup>

The Court's decision was based on obligations of the state imposed by section 24 of the *Constitution*, the municipal executive and legislative power provided for in section 156 of the *Constitution*, co-operative governance, the definition of "municipal planning", and national and provincial support for local environmental governance.<sup>223</sup> The Court's decision in the *Le Sueur* case has benefitted the potential for adaptive governance and has put local governance in a better position to co-responsibly realise section 24.<sup>224</sup>

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<sup>216</sup> *Maccsand (Pty) Ltd v City of Cape Town* 2012 4 SA 181 CC para 43.

<sup>217</sup> *Le Sueur v eThekweni Municipality* 2013 ZAKZPHC 6.

<sup>218</sup> *Le Sueur* case para 1.

<sup>219</sup> Humby 2014 *PER* 1660.

<sup>220</sup> Humby 2014 *PER* 1661.

<sup>221</sup> Humby 2014 *PER* 1661.

<sup>222</sup> *Le Sueur* case para 39; Humby 2014 *PER* 1664.

<sup>223</sup> Humby 2014 *PER* 1664.

<sup>224</sup> Humby 2014 *PER* 1684.

While co-operative governance allows for a partnership between the spheres of government, it is still imperative that the spheres maintain their autonomy and not encroach on each other's functions and powers if the situation does not call for it.<sup>225</sup> Local governments must exercise their functions with the constitutional imperative of section 24 in mind.<sup>226</sup> However, they are not bound to perform these functions in a specific way. They could adopt innovative approaches to environmental management that exceed the expectations placed on them by their position within the spheres of government and the corresponding division of functions and powers.<sup>227</sup>

### *2.2.3.3 Local government's functions and powers contributing to environmental management*

Schedules 4B and 5B of the *Constitution* contain a specific list of the functional areas in which a municipality has executive and legislative authority.<sup>228</sup> A municipality has the right to govern on its own initiative these functional areas.<sup>229</sup> These areas include, for example; air pollution, building regulations, municipal planning, pontoons and jetties, stormwater management, water and sanitation services, beaches, cleansing, the control of public nuisances, local amenities, municipal parks and recreation, noise pollution, public places, and refuse removal, refuse dumps and solid waste disposal.<sup>230</sup> These functional areas are all inherently related to an estuary.<sup>231</sup> For example, the existence of an estuary will always be accompanied by a beach.<sup>232</sup> Stormwater and sewage recurrently flow into an estuary given its locality, whereas pontoons and jetties are often erected on estuaries.<sup>233</sup> The Knysna Estuary is currently facing hardships due to the failure of the Knysna Municipality to properly

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<sup>225</sup> Section 155(6)(b) of the *Constitution*. See also Paterson 2018 *PER* 19-20.

<sup>226</sup> See para 2.2.1.

<sup>227</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-8.

<sup>228</sup> Section 156(1)(a) of the *Constitution*. See also De Vos *et al South African Constitutional Law in Context* 295 and Paterson 2018 *PER* 18.

<sup>229</sup> Section 151(3) of the *Constitution*.

<sup>230</sup> Schedules 4B and 5B of the *Constitution*. See also Paterson 2018 *PER* 14.

<sup>231</sup> Paterson 2018 *PER* 23.

<sup>232</sup> Paterson 2018 *PER* 23.

<sup>233</sup> Paterson 2018 *PER* 23.

administer some of these functional areas under its competency.<sup>234</sup> For example, the discharge from the WWTW and stormwater runoff (stormwater management and water and sanitation) causes nutrient pollution, and the peripheral developments (municipal planning) affect the Knysna Estuary's expansion in response to climate change.<sup>235</sup>

At the same time, it is provided that a municipality may create and administer by-laws for any matter that would equate to the reasonable and effective performance of those set out in schedules 4B and 5B.<sup>236</sup> Moreover, a municipality may exercise a power that may be reasonably necessary for or incidental to effectively perform its functions.<sup>237</sup> This provision of executive authority along with the functional powers assigned to municipalities generates three types of powers, namely original, assigned and incidental powers.<sup>238</sup>

Original powers are given directly to municipalities from the *Constitution* while assigned powers are derived from national and provincial legislation.<sup>239</sup> Incidental power refers to matters that do not form part of a municipality's functional areas but are so closely connected to the "effective performance of its functions" that it is considered a part of a municipality's functional areas.<sup>240</sup> Section 7(2) of the *Constitution* read together with sections 24 and 152 is the source of interpretation of incidental municipal powers.<sup>241</sup> Be that as it may, the Court in the *Abbott vs Overstrand Municipality* case did not consider local government's original and incidental powers over the environment, or an estuary specifically.<sup>242</sup>

In 2014 David Willoughby Abbott approached the Western Cape Division of the High Court, Cape Town, to seek relief against the Overstrand Municipality for damages

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<sup>234</sup> See para 1.1.

<sup>235</sup> See para 1.1.

<sup>236</sup> Section 156(2) of the *Constitution*. See also De Vos *et al South African Constitutional Law in Context* 295.

<sup>237</sup> Section 156(5) of the *Constitution*. See also Steytler and De Visser *Local Government Law of South Africa* 5-6.

<sup>238</sup> Paterson 2018 *PER* 17.

<sup>239</sup> Freedman 2014 *PER* 569.

<sup>240</sup> Freedman 2014 *PER* 581.

<sup>241</sup> Paterson 2018 *PER* 28.

<sup>242</sup> *Abbott vs Overstrand Municipality* 2014 ZAWCHC 184 (the *Abbott ZAWCHC* case).

to his property from the flooding from the Klein River due to the Municipality allegedly failing to breach the berm as was the established practice.<sup>243</sup> The main relief sought by the appellant was in terms of sections 6(1) and 8(1)(c) of the *Promotion of Administrative Justice Act* 3 of 2000.<sup>244</sup> The High Court dismissed the case on the grounds that the damages could not unequivocally be attributed to the actions of the Municipality.<sup>245</sup> The appellant then approached the Supreme Court of Appeal (SCA), which found that the appellant failed to prove the Municipality was under a legal obligation to protect his property, as the power to manage the Estuary had not been assigned to the Overstrand municipality.<sup>246</sup>

And yet in the *Nel* case, the Court upheld that local government may make and administer by-laws for the management and use of rivers, due to rivers falling under the definition of local government original powers of public places and places of recreation.<sup>247</sup> This aligns with the *Le Sueur* case judgement, where the Court decided that local government had the authority to pass by-laws handling conservation and the protection of the environment to the extent it involves their mandate of municipal planning.<sup>248</sup> These judgements show precedent for the scope of local government's original powers over environmental matters.<sup>249</sup> According to Paterson, the SCA in the *Abbott ZASCA* case not only failed to consider the original powers local government has relating to an estuary but also the possible incidental powers.<sup>250</sup> Had the SCA considered the possibility of the "environment" and "conservation" not being "hermetically sealed compartments" from the powers and function of local government, the Court would have found that the Municipality did, in fact, have original powers to manage the Estuary.<sup>251</sup>

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<sup>243</sup> *Abbott ZAWCHC* case para 9.

<sup>244</sup> *Abbott ZAWCHC* case para 10.

<sup>245</sup> *Abbott ZAWCHC* case para 59.

<sup>246</sup> *Abbott v Overstrand Municipality 2016 ZASCA 68 (Abbott ZASCA case)* para 24.

<sup>247</sup> Paterson 2018 *PER* 20.

<sup>248</sup> Paterson 2018 *PER* 20.

<sup>249</sup> Paterson 2018 *PER* 22.

<sup>250</sup> Paterson 2018 *PER* 28.

<sup>251</sup> Paterson 2018 *PER* 23.

To reiterate, the judgement in the *Maccsand* case, co-operation between the spheres of government is important. The spheres of government must not intrude on each other's functional areas, but must co-operate when exercising their competency.<sup>252</sup> The fact that local government is closer to the areas and the people they govern exposes the reality of local government having closer involvement in activities around estuaries than the national and provincial governments.<sup>253</sup> Municipalities have the standing to know, understand, and deal with environmental issues at the local level.<sup>254</sup> Local government does not have the original authority to manage an estuary and, in Knysna's case, it is unnecessary as there is already a conservation authority taking on this role.<sup>255</sup> Despite this, local government is awarded certain functional powers which could have an impact on an estuary, and as such the management of an estuary may be incidental to the functional areas of local government.<sup>256</sup> Therefore, the researcher submits that local government can use its original powers to contribute to the management of an estuary.

### ***2.3 Perspectives from framework local government legislation***

Framework legislation aims to define overarching and generic principles in terms of which sectoral-specific legislation is embedded.<sup>257</sup> Furthermore, it provides a tool for implementing national strategies and policies.<sup>258</sup> It establishes principles to which policies and laws related to a given socio-economic right must conform and creates structures for ensuring state organs are co-ordinated and can be held accountable for the implementation of rights.<sup>259</sup>

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<sup>252</sup> *Maccsand case* para 43.

<sup>253</sup> Reg 5 of GN 341 in GG 36432 of 10 May 2013. See also Du Plessis and Fuo 2017 *Commonwealth Journal of Local Governance* 8.

<sup>254</sup> *Le Sueur case* para 20. Paterson 2018 *PER* 29.

<sup>255</sup> See para 1.1.

<sup>256</sup> Patterson 2018 *PER* 29.

<sup>257</sup> Nel and Du Plessis 2001 *SAJELP* 3.

<sup>258</sup> Khosa 2004 *ESR Review* 3.

<sup>259</sup> Khosa 2004 *ESR Review* 3.

The framework local government laws discussed in this section contain relevant principles, objectives and duties empowering local government to potentially contribute to estuarine management.<sup>260</sup>

### *2.3.1 Local Government: Municipal Systems Act 32 of 2000*

The *Municipal Systems Act* dictates how municipal powers and functions should be exercised and prescribes legal matters pertaining to local government and the matters incidental thereto. As discussed above, a municipality has legislative and executive authority over matters listed in schedules 4B and 5B of the *Constitution*, and the municipal council is responsible for exercising this authority.<sup>261</sup> General municipal activities, such as setting targets for service delivery, providing municipal services, and preparing, approving and implementing a municipal budget are examples of a municipality exercising its legislative and executive authority.<sup>262</sup> The Act also states that a municipality exercises its legislative and executive authority when it promotes a safe and healthy environment.<sup>263</sup>

A municipality must ensure its residents are provided with the minimum basic municipal services.<sup>264</sup> Basic municipal services are necessary to ensure a good quality of life, without which the environment and public health would be in danger.<sup>265</sup> Failure to provide these services in an environmentally sustainable manner, and to the effect that it promotes a safe and healthy environment, may result in liability on the part of the municipality.<sup>266</sup>

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<sup>260</sup> Du Plessis *Fulfilment of South Africa's Environmental Constitutional Right in the Local Government Sphere* 13.

<sup>261</sup> Section 151(2) of the *Constitution*.

<sup>262</sup> Section 11(3) of the *Municipal Systems Act*.

<sup>263</sup> Section 11(3)(l) of the *Municipal Systems Act*.

<sup>264</sup> Section 73(1)(c) of the *Municipal Systems Act*. See also May and Agenbag "Environmental Health and Municipal Public Health Services" 15-30. Basic municipal services are defined by both the *Municipal Systems Act* and the *Local Government: Municipal Finance Management Act* 56 of 2003 (*MFMA*) as "a municipal service that is necessary to ensure an acceptable and reasonable quality of life and, if not provided, would endanger public health or safety or the environment". Therefore, these services are important to ensure a safe and healthy environment and will be applicable to this study.

<sup>265</sup> Section 1 of the *Municipal Systems Act*. See also Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-40.

<sup>266</sup> Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-42.

Considering these provisions suggests that environmental objectives, such as the protection of an estuary, are intricately linked to municipal service delivery.<sup>267</sup> In order to satisfy the environmentally sustainable requirement, the provision of services must regularly be evaluated with the objective in mind to improve and upgrade them.<sup>268</sup>

Environmental sustainability in terms of municipal services is regarded as minimising risk while simultaneously maximising potential benefits to the environment and human health and complying with legislation aimed at the protection thereof.<sup>269</sup> Municipalities must review their mechanisms of service delivery, regardless of whether the mechanisms are internal or external.<sup>270</sup> This review must be accompanied by an assessment of the effects on the environment and human health, well-being, and safety.<sup>271</sup> The *Municipal Systems Act* therefore bestows an environmental duty onto municipalities by stating that municipal services need to be provided in an environmentally sustainable manner.<sup>272</sup> When adopting and implementing a tariff policy on the levying of fees for municipal services, the policy must reflect the principles set out in the Act.<sup>273</sup> Among these principles is to encourage the efficient, effective and economical use of resources as well as other environmental objectives.<sup>274</sup>

Thus, the *Municipal Systems Act* promotes the notion that a municipal council must utilise the instruments at its disposal, such as those of a financial and administrative nature, to ensure that its functions are carried out in an environmentally and financially sustainable manner.<sup>275</sup> Moreover, a municipality must use the instruments at its disposal to promote a safe and healthy environment.<sup>276</sup>

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<sup>267</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution by Local Government" 7-19.

<sup>268</sup> Section 73(2) of the *Municipal Systems Act*. See also Du Plessis and Nel "An Introduction" 1-12.

<sup>269</sup> Section 1 of the *Municipal Systems Act*. See also Du Plessis and Nel "An Introduction" 1-12.

<sup>270</sup> Sections 77(a), 78(1)(a)(1) and 78(3)(b)(i) of the *Municipal Systems Act*.

<sup>271</sup> Section 78(1)(a)(i) of the *Municipal Systems Act*.

<sup>272</sup> Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-42.

<sup>273</sup> Section 74(2) of the *Municipal Systems Act*.

<sup>274</sup> Section 74(2)(h) of the *Municipal Systems Act*.

<sup>275</sup> Section 4(2)(d) of the *Municipal Systems Act*.

<sup>276</sup> Section 4(2)(i) of the *Municipal Systems Act*.

### 2.3.2 Local Government: Municipal Structures Act 117 of 1998

The *Local Government: Municipal Structures Act 117 of 1998* (the *Municipal Structures Act*) divides the functions and powers between the distinct categories of municipalities. The Act provides that a municipality must endeavour to achieve the objectives set out in the *Constitution*, which as discussed above, includes promoting a safe and healthy environment.<sup>277</sup>

The powers and functions of local government are distributed between the local and the district municipalities with the same jurisdictional area.<sup>278</sup> The Act is lethargic in providing for the division of functions and powers between a district and local municipality and merely specifies what the powers and functions of a district municipality are.<sup>279</sup> Whatever is not allocated to the district municipality from schedules 4B and 5B becomes the powers and functions of the local municipality.<sup>280</sup> District municipalities are in charge of domestic wastewater and sewage disposal systems as well as determining a solid waste disposal strategy and in turn the regulation of solid waste disposal.<sup>281</sup> Municipal health services also form part of a district municipality's functions and powers.<sup>282</sup>

This leaves local municipalities with municipal planning, pontoons, ferries, jetties, piers and harbours (often erected on estuaries), stormwater management (given their locality, estuaries are often the recipients of stormwater), beaches (which often accompany an estuary) and amusement facilities, local amenities and public places (estuaries fit the description of these places) as environmentally relevant functions

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<sup>277</sup> Section 19(1) of the *Municipal Structures Act*.

<sup>278</sup> Section 83(2) of the *Municipal Structures Act*.

<sup>279</sup> Section 84(2) of the *Municipal Structures Act*.

<sup>280</sup> Section 84(2) of the *Municipal Structures Act*.

<sup>281</sup> Sections 84(1)(d) and (e) of the *Municipal Structures Act*.

<sup>282</sup> Section 84(1)(i) of the *Municipal Structures Act*. Municipal health services are defined in the *National Health Act* 61 of 2003 (*NHA*) as nine components, including water quality monitoring, waste management and environmental pollution control which are relevant to estuaries; s1 of the *NHA*.

and powers.<sup>283</sup> These functions and powers are original powers relevant to the management of an estuary, as discussed above.<sup>284</sup>

However, it is possible that a local municipality takes on potable water supply systems, bulk supply of electricity, domestic wastewater and sewage disposal systems and municipal health services as part of its powers and functions if granted the authority to do so.<sup>285</sup> This is the case with Knysna Municipality concerning sewage disposal systems, as they are directly called out for mismanaging the WWTW, which is a large factor in the Knysna Estuary's pollution.<sup>286</sup>

### *2.3.3 Local Government: Municipal Finance Management Act 56 of 2003*

The *MFMA* governs municipalities' financial affairs. A municipality's financial capacity is important in promoting a safe and healthy environment.<sup>287</sup> The object of the Act is to secure sound and sustainable management of the financial affairs of a municipality through establishing norms and standards for their financial and fiscal activities.<sup>288</sup>

The preparation, approval, and implementation of a municipal budget is an example of the municipality exercising its executive and legislative authority.<sup>289</sup> Since an estuary is not within the functions and powers of a local municipality, they cannot include the management costs of an estuary in their budget. However, a municipality may budget for its original functions and powers, some of which relate to an estuary.<sup>290</sup>

A municipality's budget and administration must be managed in a way that gives priority to the community's basic needs while promoting the social and economic

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<sup>283</sup> Sections 84(1) and 84(2) of the *Municipal Structures Act* and schedules 4B and 5B of the *Constitution*. See also Paterson 2018 *PER* 23.

<sup>284</sup> See para 2.2.3.3.

<sup>285</sup> Section 84(3)(a) of the *Municipal Structures Act*. See also Swart and Adams "Water Service Provisions and the Protection of Water Resources" 14-24.

<sup>286</sup> See para 1.1.

<sup>287</sup> Section 4(2)(i) of the *Municipal Systems Act*.

<sup>288</sup> Section 2 of the *MFMA*.

<sup>289</sup> See para 2.2.3.1.

<sup>290</sup> See para 2.3.2.

development of the community.<sup>291</sup> The Knysna Municipality's budget must therefore be managed in a way that promotes the health of the Knysna Estuary, as it largely contributes to the economic development in the area.<sup>292</sup>

A municipality may only incur expenses that have been approved in their budget and within the limits of the appropriated amount.<sup>293</sup> However, if it becomes necessary to revise the annual budget, this may be done by way of an adjustment budget.<sup>294</sup> An adjustment budget may allow for unforeseen or unavoidable expenses as long as it is done within a prescribed framework.<sup>295</sup> The mayor may authorise unforeseen or unavoidable expenses in cases of emergency or exceptional circumstances.<sup>296</sup> Environmental concerns relevant to these emergencies or exceptional circumstances are typically environmental or climate-related disasters regulated by the *Disaster Management Act 57 of 2002 (DMA)*.<sup>297</sup> Moreover, the adjustment budget may also allow for expenditure on critical environmental infrastructure demands such as stormwater.<sup>298</sup>

The *MFMA* prohibits a municipality from any actions that would inhibit the provision of basic municipal services.<sup>299</sup> Basic municipal services are a fundamental function of municipalities, and their importance stems from the connection with the health and safety of humans and the promotion of a safe and healthy environment.<sup>300</sup>

*Kenton on Sea Ratepayers Association v Ndlambe Local Municipality (Kenton on Sea case)* is a good point of reference for the link between basic municipal services and

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<sup>291</sup> Section 153(a) of the *Constitution*.

<sup>292</sup> See para 1.1. See also Currie and De Waal *The Bill of Rights Handbook* 526.

<sup>293</sup> Section 15 of the *MFMA*.

<sup>294</sup> Section 28(1) of the *MFMA*.

<sup>295</sup> Section 28(1)(c) of the *MFMA*.

<sup>296</sup> Section 29(1) of the *MFMA*.

<sup>297</sup> Knox-Mosdell and Coetzee "Processes for Action on Utilities and Environmentally Related Projects for Sustained and Effective Local Environmental Governance" 27-12. The *DMA* defines a disaster as a progressive or sudden, widespread, or localised natural or human-caused occurrence which causes or threatens to cause any disease to humans or damage to the environment. The nutrient pollution could therefore be seen as a disaster.

<sup>298</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-27.

<sup>299</sup> Sections 14, 48 and 90 of the *MFMA*. See para 2.3.1.

<sup>300</sup> Twani and Soyapi 2022 *SAJHR* 98. See para 2.3.1.

the environment.<sup>301</sup> The first respondent's neglect of the sewage reticulation system and sewage works led to raw sewage frequently spilt over the conservancy tank into the Bushman's River Estuary.<sup>302</sup> It escalated to the point where the applicants approached the Court to order the authorities to maintain the pump station running the sewage reticulation.<sup>303</sup> It was stated that failure to do so would mean an infringement of the applicant's rights to a safe and healthy environment set out in section 24 of the Constitution.<sup>304</sup> The nexus between the environment and municipal services is a tight-knit one, and any hindrance in basic municipal services could be to the detriment of the environment.<sup>305</sup> Thus the financial capacity of a municipality is a large driving force in the realisation of environmental objectives *vis-à-vis* basic municipal services and exercising their original functions and powers.

## ***2.4 Perspectives from national environmental framework legislation***

Environmental framework legislation provides principles and obligations in relation to the environment and environmental management.<sup>306</sup> It also aims to promote co-operative environmental governance among diverse and segmented sectors.<sup>307</sup> Environmental framework legislation also sets out to ensure the use of innovative integration of multiple environmental management tools and instruments for the benefit of the environment.<sup>308</sup> The Acts discussed are relevant to estuaries as well as municipalities.<sup>309</sup>

### ***2.4.1 National Environmental Management Act 107 of 1998***

The interpretation and application of the *NEMA* must be in conjunction with the rights set out in the Bill of Rights.<sup>310</sup> As discussed above, the *NEMA* adopts the

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<sup>301</sup> *Kenton on Sea Ratepayers Association v Ndlambe Local Municipality* 2017 2 SA 86 (ECG).

<sup>302</sup> *Kenton on Sea case* para 4.

<sup>303</sup> *Kenton on Sea case* para 7.

<sup>304</sup> *Kenton on Sea case* para 16. See also Twani and Soyapi 2022 *SAJHR* 105.

<sup>305</sup> Twani and Soyapi 2022 *SAJHR* 97.

<sup>306</sup> Nel and Du Plessis 2001 *SAJELP* 3.

<sup>307</sup> Nel and Du Plessis 2001 *SAJELP* 3.

<sup>308</sup> Nel and Du Plessis 2001 *SAJELP* 3.

<sup>309</sup> According to Nel and Du Plessis, the *NEMA* is the only true environmental framework law but the *NWA*, which is a sectoral-specific legislation, contains some framework legislation elements and for the purposes of this study will be treated as such; Nel and Du Plessis 2001 *SAJELP* 2.

<sup>310</sup> Section 2(1)(a) of the *NEMA*.

orthodox anthropocentric view that people's interests are at the centre of the environmental right.<sup>311</sup> Moreover, the *NEMA* provides a broad range of restrictions and obligations applicable to local government, both as a regulated entity and regulator of pollution.<sup>312</sup> All organs of state, including local municipalities, which perform activities that impact the environment, must adhere to the principles set out in the *NEMA*, which is the foundation of environmental management in South Africa.<sup>313</sup> Legislation relevant to environmental management must be interpreted with these principles in mind.<sup>314</sup> These principles inform all decisions and the performance of functions that influence the protection of the environment.<sup>315</sup>

The Act states that development must be socially, environmentally and economically sustainable.<sup>316</sup> This is known as the principle of sustainability.<sup>317</sup> For development to be considered sustainable by the Act's standards, it needs to avoid or minimise the disturbance of ecosystems, the loss of biological diversity, and the degradation of the environment.<sup>318</sup> Sustainable development in this sense is particularly important around an estuary with a valuable ecosystem.<sup>319</sup>

Moreover, the Act prescribes that sustainable development requires that the use and exploitation of renewable resources and the ecosystems to which they belong, do not exceed the point where their integrity is jeopardised.<sup>320</sup> This is known as the

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<sup>311</sup> See para 2.2.1.

<sup>312</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-23.

<sup>313</sup> Section 2(1) of the *NEMA*. See also Glazewski *Environmental Law in South Africa* 17-36. An organ of state is defined in s239 of the *Constitution* as any department of state or administration in the national, provincial, or local sphere of government exercising a power or performing a function in terms of the Constitution or a provincial constitution; or exercising a public power or performing a public function in terms of any legislation but does not include a court or a judicial officer. This definition would include a local municipality. While there has been academic discourse on what can be regarded as distinctive principles of environmental law, Cowen, Kidd and Glazewski's suggested lists have similarities; Henderson 2001 *SAJELP* 146. For the purpose of this study only the better-known environmental management principles most relevant to the Knysna Estuary will be used; Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-23.

<sup>314</sup> Section 2(1)(c) of the *NEMA*.

<sup>315</sup> Section 2(1)(c) of the *NEMA*. See also Paterson 2018 *PER* 21.

<sup>316</sup> Section 2(3) of the *NEMA*.

<sup>317</sup> Section 2(3) of the *NEMA*. See also Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-24.

<sup>318</sup> Section 2(4)(a) of the *NEMA*. See also Paterson 2018 *PER* 21.

<sup>319</sup> See para 1.1.

<sup>320</sup> Section 2(4)(a)(vi) of the *NEMA*.

principle of carrying capacity and ecological integrity, and a municipality must ensure that development does not irreparably damage the environment.<sup>321</sup> Sustainable development is also achieved by applying a risk-averse and cautious approach which considers the current limited knowledge about the consequences of decisions and actions.<sup>322</sup> This is called the precautionary principle and indicates that a lack of scientific information is not an excuse for a municipality not to take action when environmental damage is a looming threat.<sup>323</sup> Activities that can or will have negative impacts on the environment, an estuary, and people's environmental rights should be anticipated and prevented.<sup>324</sup> This is known as the preventative principle, which aims to minimise environmental damage by taking action at an early stage.<sup>325</sup> Where these outcomes cannot be completely avoided or minimised, they should be remedied.<sup>326</sup> Yet, municipalities must attempt to prevent environmental harm, rather than remediate or minimise the damage.<sup>327</sup>

Integrating environmental management into the actions or decisions of a municipality is important because all elements of the environment are linked and interrelated.<sup>328</sup> This stems from the principle of the best practicable environmental option, which means a municipality's decisions must lead to the option providing the most environmental benefits and causing the least damage.<sup>329</sup> The life-cycle liability principle, also known as the cradle-to-grave principle, provides that responsibility for environmental health and the consequences of a programme, policy, project, service or product exists throughout its lifetime.<sup>330</sup> Polluters, including municipalities, must be held responsible for the environmental impacts

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<sup>321</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-24.

<sup>322</sup> Section 2(4)(a)(vii) of the *NEMA*.

<sup>323</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-24.

<sup>324</sup> Section 2(4)(a)(viii) of the *NEMA*.

<sup>325</sup> Glazewski *Environmental Law in South Africa* 1-28.

<sup>326</sup> Section 2(4)(a)(viii) of the *NEMA*.

<sup>327</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-24.

<sup>328</sup> Section 2(4)(b) of the *NEMA*.

<sup>329</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-25.

<sup>330</sup> Section 2(4)(e) of the *NEMA*.

caused by their programmes, policies, projects, services or products from start to end.<sup>331</sup>

The Act calls for all interested or affected parties to participate in environmental governance, and further provides that the needs of these parties must be considered when deciding on matters regarding the environment.<sup>332</sup> This is the principle of participatory governance and advocates that a municipality must allow the community to participate in decisions which may have an impact on the environment and affect their health and well-being.<sup>333</sup> Furthermore, decisions on activities which can either benefit or negatively impact the environment must be informed by an assessment and evaluation of the social, economic and environmental impacts thereon.<sup>334</sup> Co-ordination between spheres of government is needed to achieve consolidated legislation and activities regarding the environment.<sup>335</sup> Persons responsible for pollution and ecological degradation are obligated by the *NEMA* to carry the costs for mitigating or remedying the damage caused.<sup>336</sup> This is known as the polluter pays principle and is the cornerstone for pollution control.<sup>337</sup>

The Act places a general duty of care upon persons who are guilty of negatively impacting the environment.<sup>338</sup> Anyone who has at any time caused, or will cause, pollution or degradation to the environment must take reasonable measures to stop the pollution from happening, or where this is not possible, either minimise or rectify the effects of the damage.<sup>339</sup> These measures include conducting environmental impact assessments and providing education on the risks for all parties involved in causing it.<sup>340</sup> The *NEMA* prescribed requirements to carry out an environmental impact assessment.<sup>341</sup> The procedures for the investigation, assessment and

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<sup>331</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-25.

<sup>332</sup> Sections 2(4)(f) and 2(4)(g) of the *NEMA*.

<sup>333</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution" 7-25.

<sup>334</sup> Section 2(4)(i) of the *NEMA*.

<sup>335</sup> Section 2(4)(l) of the *NEMA*.

<sup>336</sup> Section 2(4)(p) of the *NEMA*.

<sup>337</sup> Glazewski *Environmental Law in South Africa* 20-29.

<sup>338</sup> Section 28 of the *NEMA*. See also Glazewski *Environmental Law in South Africa* 7-21.

<sup>339</sup> Section 28(1) of the *NEMA*.

<sup>340</sup> Sections 28(3)(a) and (b) of the *NEMA*.

<sup>341</sup> Section 24 of the *NEMA*. See also Glazewski *Environmental Law in South Africa* 10-23.

communication of the potential consequences or impacts of activities on the environment are set out in the Act.<sup>342</sup> Clearly, the provision of environmental impact assessment only focuses on activities that must be performed rather than specific outcomes that must be achieved.<sup>343</sup> Furthermore, these provisions apply in advance to the activities which impact the environment; they are not remedial. However, there are reasonable measures in the *NEMA* that are remedial, such as the provision that activities that cause pollution must be stopped, modified or controlled.<sup>344</sup> In the event the pollutants have already infiltrated an area, effort should be made to contain or prevent further movement.<sup>345</sup> The source of pollution should be removed, and the effects rectified.<sup>346</sup>

The *NEMA* enables municipalities to enter into environmental management co-operation agreements (EMCAs) with any person or community to ensure compliance with the *NEMA* principles.<sup>347</sup> Such agreements may be beneficial for the prevention of various threats to the environment such as wastewater pollution.<sup>348</sup> These EMCAs and the persons undertaking to enforce them may allow for the improvement of the standards that the law prescribes for the protection of the environment.<sup>349</sup> EMCAs may only be entered into if the relevant role players agree thereto, such as the organs of state who have jurisdiction over the matter, the Minister of the Environment, Forestry and Fisheries and the MEC of the province.<sup>350</sup>

Municipalities may adopt model by-laws created by the Minister as municipal by-laws.<sup>351</sup> The purpose of these by-laws is to minimise threats to the environment as

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<sup>342</sup> Section 24(4) of the *NEMA*.

<sup>343</sup> Glazewski *Environmental Law in South Africa* 10-25.

<sup>344</sup> Section 28(3)(c) of the *NEMA*.

<sup>345</sup> Section 28(3)(d) of the *NEMA*.

<sup>346</sup> Sections 28(3)(e) and (f) of the *NEMA*.

<sup>347</sup> Section 35(1) of the *NEMA*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-45 and Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution by Local Government" 7-36.

<sup>348</sup> Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution by Local Government" 7-36.

<sup>349</sup> Section 35(3) of the *NEMA*. See also Knox-Mosdell and Kotzé "The Regulation and Mitigation of Environmental Pollution by Local Government" 7-36.

<sup>350</sup> Section 35(2)(a) of the *NEMA*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-45.

<sup>351</sup> Section 46(1) of the *NEMA*.

well as to ensure that municipalities co-operate with other organs of state to facilitate environmental management and conserve resources effectively and efficiently within their jurisdiction.<sup>352</sup> Estuaries and other sensitive and vulnerable ecosystems impacted by human activities, such as resource depletion and development must be given special consideration in management and planning procedures.<sup>353</sup>

#### *2.4.2 National Water Act 36 of 1998*

The *NWA* states that an estuary forms part of the definition of a water resource, and a river falls into the definition of a water course.<sup>354</sup> The Minister of Water and Sanitation must develop a national water strategy in which guidelines need to be set out that determine how water resources must be developed, protected, used, conserved, managed and controlled.<sup>355</sup> Whoever owns land on which an activity or situation exists that causes or is likely to cause pollution to a water resource must take all reasonable steps to prevent such pollution from happening or continuing to happen.<sup>356</sup> These reasonable steps are to be taken according to the principles of the *NEMA* as discussed above.<sup>357</sup> This includes halting activities which cause the pollution, containing pollutants and remedying the effects of the pollution.<sup>358</sup>

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<sup>352</sup> Section 46(4) of the *NEMA*. The purpose of the model by-laws is to facilitate the implementation of decisions taken, and conditions imposed as a result of the authorisation of new activities and developments, or through the setting of norms and standards in respect of existing activities and development and ensure effective environmental management and conservation of resources and impacts within the jurisdiction of a municipality in co-operation with other organs of state. These by-laws must include measures for environmental management, including auditing, monitoring and ensuring compliance, reporting requirements, and furnishing of information.

<sup>353</sup> Section 2(4)(r) of the *NEMA*.

<sup>354</sup> Section 1 of the *NWA*.

<sup>355</sup> Sections 5(1) and 5(3) of the *NWA*. The most recent National Water Resource Strategy calls for the development of water resource, feasibility, reconciliation, balance and climate change adaptation studies and plans that also include wetlands and estuaries as these systems also play a vital role in the quality and maintenance of groundwater and surface water. It acknowledges the destruction of ecological infrastructure may lead to accelerated water quality impacts. The Strategy also provides guiding principles for water resource protection which extends to an estuary. Department of Water and Sanitation 2023 *National Water Strategy III* 70.

<sup>356</sup> Section 19(1) of the *NWA*.

<sup>357</sup> See 2.4.1.

<sup>358</sup> Section 19(2) of the *NWA*.

On the subject of pollution and waste discharge, the Act does permit a person to discharge wastewater or runoff water without a license into a canal, sea outfall or conduit if they have permission from the person in control of those waterways.<sup>359</sup> The discharge of wastewater must adhere to standards and management practices the Minister has set, unless the conditions of the relevant authorisation provide otherwise.<sup>360</sup> The Minister must take into consideration the protection and conservation of water sources when deciding on these standards.<sup>361</sup> The judgement in the *Minister of Water and Sanitation v Msukwaligwa Local Municipality* case highlights the consequences of a local municipality not adhering to the provisions of the *NWA*.<sup>362</sup>

This case relates to the maintenance, repair, and upgrade of infrastructure for the operation of a WWTW and a municipality's non-compliance with water service standards as prescribed by the *NWA*.<sup>363</sup> The Minister of Water and Sanitation as the applicant brought the application to the Court against the first respondent, the Msukwaligwa Local Municipality.<sup>364</sup> The applicant sought relief in the form of an interdict against the Municipality for contravening the provisions of the *NWA* as well as the national norms and standards applicable to water resources and basic sanitation services management.<sup>365</sup>

For several years, the DWS issued directives to the Municipality to resolve the pollution and contamination problems that originated from the Ermelo WWTW.<sup>366</sup> The Ermelo WWTW had fallen into a state of dysfunction due to improper maintenance by the Municipality.<sup>367</sup> As a result, the discharged water contained high levels of e-coli and human faecal matter which was pumped into a stream flowing

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<sup>359</sup> Schedule 1(f) of the *NWA*. See also s22(1)(a)(i) of the *NWA*.

<sup>360</sup> Sections 22(2)(c) and 26(1) of the *NWA*.

<sup>361</sup> Section 26(4)(c) of the *NWA*.

<sup>362</sup> *Minister of Water and Sanitation v Msukwaligwa Local Municipality* (unreported) case number 4860/2022 of 20 September 2023 (*Msukwaligwa* case).

<sup>363</sup> *Msukwaligwa* case para 1.

<sup>364</sup> *Msukwaligwa* case para 2.

<sup>365</sup> *Msukwaligwa* case para 3.

<sup>366</sup> *Msukwaligwa* case para 5.

<sup>367</sup> *Msukwaligwa* case para 4.

into the reservoir supplying bulk water to the surrounding area.<sup>368</sup> The resulting pollution of the water resource threatened the health of humans, aquatic species and livestock.<sup>369</sup>

The Court stated that the actions of the Municipality egregiously violated the constitutional rights of the communities impacted by this water pollution.<sup>370</sup> The Court specifically mentioned, among other considerations, the socio-economic rights mentioned earlier in this study, namely the environmental right and the right of access to water were being violated by the respondent.<sup>371</sup> Furthermore, the Court reiterated the importance of the Municipality's role in taking measures to prevent the violation of these rights.<sup>372</sup> The Court further stated that the Municipality was in breach of constitutionally mandated obligations pertaining to socio-economic rights, such as the provision of a safe and healthy environment, and the provision of basic water and sanitation.<sup>373</sup>

From the above discussion, the Knysna Municipality's management of the WWTW constitutes a breach of constitutionally mandated objectives and is in contravention of statutory obligations in the *NWA* relating to the Estuary. This is not new, as the criminal case against the Municipality already indicated.<sup>374</sup> Therefore, for the purposes of this study, the focus is not so much on the statutory obligations of the Municipality in terms of compliance with environmental law, but if and how their LEG instruments can be employed to achieve environmental outcomes.<sup>375</sup>

## ***2.5 Provincial law pertaining to local government and the environment***

The provincial laws discussed in this section are relevant to environmental management at the local level.

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<sup>368</sup> *Msukwaligwa* case para 4.

<sup>369</sup> *Msukwaligwa* case para 15.

<sup>370</sup> *Msukwaligwa* case para 32.

<sup>371</sup> *Msukwaligwa* case para 32. See para 2.2.1 and 2.2.2.

<sup>372</sup> *Msukwaligwa* case para 34.

<sup>373</sup> *Msukwaligwa* case para 34.

<sup>374</sup> See para 1.1.

<sup>375</sup> See para 1.1.

### 2.5.1 *Constitution of the Western Cape Act 1 of 1998*

Subject to the national *Constitution*, the *Constitution of the Western Cape Act 1 of 1998* (*WC Constitution*) is the highest provincial law in the Western Cape province.<sup>376</sup> For the most part, the *WC Constitution* repeats the principles and provisions of the national *Constitution* and upholds the need for co-operative governance between all spheres of government.<sup>377</sup>

The *WC Constitution* places an obligation on the Western Cape Government to implement policies that actively promote and sustain the welfare of its citizens as well as protect the environment, including the unique fauna and flora found in the Western Cape, for the benefit of future generations.<sup>378</sup> Unique fauna and flora are present in the Knysna Estuary, which is why it is of such conservational importance.<sup>379</sup> The *WC Constitution* repeats the provisions that the *Constitution* imposes with regard to the functions and powers of local government and the obligation the provincial government has to support municipalities in performing their own functions.<sup>380</sup> The *WC Constitution* also places an obligation on the provincial government to assign the administration of matters in schedules 4A and 5A to a municipality with the necessary capacity, if doing so would contribute to the efficient administration thereof.<sup>381</sup> As discussed above, the efficient administration of municipal activities consequently leads to a safe and healthy environment.<sup>382</sup>

### 2.5.2 *Western Cape Biodiversity Act 6 of 2021*

The *Western Cape Biodiversity Act 6 of 2021* (*WC Biodiversity Act*) had been signed into law at the time of writing this study. This Act repeals and replaces several other existing provincial laws. However, several chapters of the Act are not yet fully in

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<sup>376</sup> Section 4 of the *WC Constitution*.

<sup>377</sup> Sections 1 to 4 of the *WC Constitution*. See also s7 of the *WC Constitution*.

<sup>378</sup> Section 81(m) of the *WC Constitution*.

<sup>379</sup> See para 1.1.

<sup>380</sup> Section 51(2) of the *WC Constitution*.

<sup>381</sup> Section 52(3) of the *WC Constitution*.

<sup>382</sup> See para 2.2.3.3.

operation.<sup>383</sup> Consequently, those other acts and ordinances, such as the *Western Cape Biosphere Reserves Act* 6 of 2011 (*Biosphere Reserves Act*) and the *Nature Conservation Ordinance* 19 of 1974 (*Nature Conservation Ordinance*), have not yet been repealed and are still in operation.<sup>384</sup>

The *Biosphere Reserves Act* facilitates the management and designation of Biosphere reserves in the Western Cape.<sup>385</sup> The Knysna Estuary falls within the Garden Route Biosphere Reserve.<sup>386</sup> As such, a biosphere framework plan compiled by a management committee must comply with the relevant municipality's IDP and spatial framework.<sup>387</sup> This framework plan was not available for analysis by this study. The management committee of the biosphere must also furnish the Municipality with a report on its activities, but the Act fails to specify what, if any, powers or responsibilities the Municipality has regarding the biosphere.<sup>388</sup>

The *Nature Conservation Ordinance* aims to consolidate and amend the laws relating to conservation and provide for matters incidental to it.<sup>389</sup> The Ordinance also provides schedules for endangered and protected animals and subsequently assists officials in protecting biodiversity.<sup>390</sup> However, this Ordinance is outdated, because it does not mention the Knysna Seahorse as an endangered species, and provides authority to a local authority as defined in the *Republic of South Africa Constitution*

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<sup>383</sup> Chapters 1, 2, 3, 4 and 5 are in operation. Chapter 6, with the exclusion of section 39(1)(b) and Parts 2, 3 and 4 are in operation. Chapter 12 is in operation, excluding ss79, 80, 88(1), (2) and (3) and 87 repealing the following laws: the *Sea Shore Act*, 1935 (Act 21 of 1935); the *Mountain Catchment Areas Act*, 1970 (Act 63 of 1970); the *Nature Conservation Ordinance*, 1974 (Ordinance 19 of 1974); the *Western Cape Nature and Environmental Conservation Ordinance Amendment Act*, 1999 (Act 8 of 1999); the *Western Cape Nature Conservation Laws Amendment Act*, 2000 (Act 3 of 2000); and the *Western Cape Biosphere Reserves Act*, 2011 (Act 6 of 2011). These chapters of the Act come into operation on 15 November 2022; Proc 18 in Province of the Western Cape: Provincial Gazette Extraordinary 8682 of 11 November 2022.

<sup>384</sup> Proc 18 in Province of the Western Cape: Provincial Gazette Extraordinary 8682 of 11 November 2022.

<sup>385</sup> Preamble of the *Biosphere Reserves Act*.

<sup>386</sup> UNESCO 2019 <https://www.unesco.org/en/mab/garden-route>; Garden Route Biosphere Reserve date unknown <https://tinyurl.com/28twhrbz>.

<sup>387</sup> Section 6(3)(c) of the *Biosphere Reserves Act*.

<sup>388</sup> Section 5(4)(c) of the *Biosphere Reserves Act*.

<sup>389</sup> Preamble of the *Nature Conservation Ordinance*.

<sup>390</sup> Preamble of the *Nature Conservation Ordinance*.

*Act 32 of 1961 (Republic of South Africa Constitution Act, 1961).*<sup>391</sup> The Ordinance provides a local authority with the authority to grant permits for hunting wild animals and picking flora, and to appoint nature conservation rangers.<sup>392</sup> The Ordinance does not provide for any principles, duties or objectives the local authority must comply with.

The *WC Biodiversity Act* promises a more modern approach to conservation in the Western Cape. It binds all organs of state and all persons and does not leave interpretation to outdated legislation like the *Nature Conservation Ordinance* does.<sup>393</sup> The Act prescribes specifically that, in the event an organ of state performs a function that adversely affects the environment, they must comply with the principles of ecological sustainability as prescribed in section 6 of the Act and the environmental management principles in the *NEMA*.<sup>394</sup> The principles of ecological sustainability include taking into account the intrinsic value and benefits of natural resources and ecosystems, ensuring that development does not undermine the long-term persistence and resilience of biodiversity, ecosystems, and ecological infrastructure, avoiding or minimising and remedying the disturbance of ecosystems and loss of biological diversity, and ensuring that a risk-averse and cautious approach is applied.<sup>395</sup>

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<sup>391</sup> A local authority is any institution or body contemplated in section 84(1)(f) of the *Republic of South Africa Constitution Act, 1961*; s1 of the *Nature Conservation Ordinance*. S84(1)(f) of the *Republic of South Africa, 1961* includes municipal institutions.

<sup>392</sup> Sections 14(b)(iii) and 23(1) of the *Nature Conservation Ordinance*.

<sup>393</sup> Section 3 of the *WC Biodiversity Act*.

<sup>394</sup> Sections 5(b) and (c) of the *WC Biodiversity Act*.

<sup>395</sup> Section 6 of the *WC Biodiversity Act*. The full list of ecologically sustainable principles are: take account of the benefits and intrinsic and use value of natural resources and ecosystems; ensure that biodiversity and ecosystems are protected, maintained and rehabilitated in a manner that enables the attainment of biodiversity targets for conservation set by the Province; promote the resilience of biodiversity, ecosystems and ecological infrastructure; ensure that development does not undermine the long-term persistence and resilience of biodiversity, ecosystems and ecological infrastructure; ensure that the conservation and resilience of biodiversity for the benefit of present and future generations are given priority over the interests of any member or members of any community; avoid or, where they cannot altogether be avoided, minimise and remedy the disturbance of ecosystems and loss of biological diversity; ensure that indigenous biological resources are used in a manner that is ecologically sustainable, and takes into account the well-being of any faunal biological resource involved; and ensure that a risk-averse and cautious approach is applied, so that where there is insufficient evidence that an activity will not cause a long-term adverse effect, it should be avoided.

### 2.5.3 *Western Cape Land Use Planning Act 3 of 2014*

Being a functional area of municipalities, municipal planning must adhere to the terms of the *Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)* as national law. This Act requires municipalities to consider environmental factors when developing spatial planning instruments, such as Spatial Development Frameworks (SDFs) and land use schemes, and when making land development decisions.<sup>396</sup> Such land use schemes must consider any environmental management instruments the relevant authority has set up and must adhere to environmental legislation.<sup>397</sup>

The *Western Cape Land Use Planning Act 3 of 2014 (WCLUPA)* as the provincial iteration of *SPLUMA* largely reaffirms what is said in *SPLUMA*. The *WCLUPA* prescribes principles that guide land use planning derived from spatial sustainability, spatial justice, efficiency, good administration and spatial resilience.<sup>398</sup> Land use measures should be consistently upheld in agreement with environmental management instruments.<sup>399</sup> The Act promotes the sustained protection of the environment by upholding that due regard should be given to areas of biodiversity importance, the natural habitat, and ecological corridors.<sup>400</sup> This is particularly relevant for the Knysna Estuary as it holds great biodiversity importance.<sup>401</sup> Again the connection and relationship between the spheres of government is emphasised, as the Act prescribes that all spheres of government should have a united approach to land use planning, and any decisions made in regard thereof should minimise negative environmental impacts, and as such, any negative impacts to an estuary.<sup>402</sup>

The Act states that municipalities are responsible for land use planning in their areas of jurisdiction.<sup>403</sup> Municipalities have the duty to regulate the development, adoption

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<sup>396</sup> Section 7(b)(iii) of the *SPLUMA*.

<sup>397</sup> Section 24(2)(b) of the *SPLUMA*.

<sup>398</sup> Section 59(2) of the *WCLUPA*.

<sup>399</sup> Section 59(2)(a)(iii) of the *WCLUPA*.

<sup>400</sup> Section 59(2)(b)(i) of the *WCLUPA*.

<sup>401</sup> See para 1.1.

<sup>402</sup> Section 59(4)(g) of the *WCLUPA*.

<sup>403</sup> Section 2(1) of the *WCLUPA*.

and review of the municipal area zoning scheme and they have full administrative authority over land use applications in their jurisdictional area.<sup>404</sup> Considering the principles the Act prescribed guiding land use planning, the Knysna Municipality is once again awarded certain environmental duties. To reiterate, one of the chief concerns around the Knysna Estuary is the fact that certain developments are too close to the watermark, and the Knysna Estuary does not have room to grow to accommodate eventual rising sea levels.<sup>405</sup> Thus, land use planning influences the function and health of the Knysna Estuary.<sup>406</sup> The people responsible for land use planning should have the necessary qualifications, as the Act affirms.<sup>407</sup>

When adopting or amending an SDF in terms of the *Municipal Systems Act*, a municipality must provide for the formation of an intergovernmental steering committee that would be in charge of creating the draft municipal SDF.<sup>408</sup> The persons appointed as part of this committee must have the necessary qualifications or knowledge and experience in environmental management or land use planning.<sup>409</sup> The provision of environmental experience as a qualification in land use planning additionally affirms the environmental consideration a municipality must take. The municipal SDF must include areas of ecological value, such as nature conservation and high biodiversity valued areas, such as an estuary for example.<sup>410</sup>

## ***2.6 Sectoral national environmental law***

The direct administration of specific environmental management acts (SEMAs) does not fall in the competency of municipalities as assigned powers, but municipalities must consider the principal frameworks that the acts provide when exercising their powers and functions.<sup>411</sup> SEMA's thus have regulatory application.<sup>412</sup> The acts referred to in the following discussion were selected due to the sector-specific issues

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<sup>404</sup> Section 2(2) of the *WCLUPA*; s24(2)(a) of the *SPLUMA*.

<sup>405</sup> See para 1.1.

<sup>406</sup> See para 1.1.

<sup>407</sup> Section 11(a) of the *WCLUPA*.

<sup>408</sup> Section 11(a) of the *WCLUPA*.

<sup>409</sup> Section 12(2) of the *WCLUPA*.

<sup>410</sup> Section 10(3)(e) of the *WCLUPA*.

<sup>411</sup> Paterson "Biodiversity" 19 – 31.

<sup>412</sup> Paterson "Biodiversity" 19 – 31.

they address. The issues addressed in these acts are relevant to estuarine management including water resources, biodiversity conservation, and waste management.

### *2.6.1 National Environmental Management: Integrated Coastal Management Act 24 of 2008*

The *National Environmental Management: Integrated Coastal Management Act 24 of 2008 (NEM: ICMA)* regulates coastal and estuarine management. The *NEM:ICMA* aims to establish a system for integrated coastal and estuarine management by including norms, standards, and policies to promote conservation, maintain natural attributes and ensure that development is socially and economically justifiable and ecologically sustainable.<sup>413</sup> The rights and duties in relation to coastal areas are also prescribed by this Act.<sup>414</sup>

The *NEM:ICMA* defines an estuary as

a body of surface water permanently or periodically open to the sea causing the water levels to rise and fall and salinity to be higher than freshwater and where there is a salinity gradient between the tidal reach and the mouth of the body of surface water.<sup>415</sup>

Interestingly, the *NEM:ICMA* provides that an estuary is the same as coastal waters and forms part of any provisions aimed at coastal waters.<sup>416</sup> Alternatively, the *NWA* states that an estuary also forms part of the definition of a water resource.<sup>417</sup> Historically, these two separate definitions have been the source of confusion regarding the management of estuaries due to two governing authorities having separate but closely intertwined responsibilities.<sup>418</sup> The confusion arose due to estuaries being classified as both marine and freshwater resources respectively.<sup>419</sup>

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<sup>413</sup> Preamble of the *NEM:ICMA*.

<sup>414</sup> Preamble of the *NEM:ICMA*

<sup>415</sup> Section 1 of the *NEM:ICMA*.

<sup>416</sup> Section 1 of the *NEM:ICMA*.

<sup>417</sup> Section 1 of the *NWA*.

<sup>418</sup> Strydom *et al Environmental Management in South Africa* 902.

<sup>419</sup> Strydom *et al Environmental Management in South Africa* 903. Section 1 of the *NWA* includes an estuary in the definition of a water resource while s1 of the *NEM:ICMA* includes estuaries as coastal waters.

The Department of Water and Sanitation (DWS) is the managing authority for freshwater resources, and the Department of Forestry, Fisheries, and the Environment (DFFE) is responsible for marine water resources; both of these are national authorities.<sup>420</sup> Even so, estuaries are subject to the National Estuarine Management Protocol, which the Minister of the DFFE prescribes.<sup>421</sup>

The authority responsible for preparing the estuarine management plan (EMP) must follow a participation process prescribed by the *NEM:ICMA*.<sup>422</sup> This participation process includes consulting the municipality that has jurisdiction over the area the EMP will affect.<sup>423</sup> A municipality is not entirely excluded from estuarine management in this regard, as the EMP may also form part of the Municipal Coastal Management Programme (CMP) allowing a municipality to make and administer by-laws for the enforcement, administration and implementation of the EMP.<sup>424</sup> The municipal CMP is an example of an environmental plan that a municipality may develop and include its IDP and SDF.<sup>425</sup>

The Act states that coastal public property consists of coastal waters.<sup>426</sup> Estuaries are therefore included in coastal public property as they fall under the definition of coastal waters.<sup>427</sup> Municipalities with jurisdiction over coastal zones must prepare and adopt a municipal CMP to manage said coastal zone.<sup>428</sup> Coastal zones are the entirety of the area associated with the coast and include the coastal property and therefore estuaries as well.<sup>429</sup> The municipal CMP must be consistent with national and provincial CMPs and the national estuarine management, which requires co-operation between the spheres of government.<sup>430</sup> The Act provides that the municipality must include its management objectives for its coastal zone, as well as

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<sup>420</sup> Strydom *et al Environmental Management in South Africa* 903.

<sup>421</sup> Section 33(1) of the *NEM:ICMA*.

<sup>422</sup> Section 34(1)(a) of the *NEM:ICMA*.

<sup>423</sup> Section 53(1)(a) of the *NEM:ICMA*.

<sup>424</sup> Sections 34(2) and 50 of the *NEM:ICMA*.

<sup>425</sup> Section 48(4) of the *NEM:ICMA*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-67.

<sup>426</sup> Section 7(a) of the *NEM:ICMA*.

<sup>427</sup> Section 1 of the *NEM:ICMA*.

<sup>428</sup> Section 48(1)(a) of the *NEM:ICMA*.

<sup>429</sup> Section 1 of the *NEM:ICMA*.

<sup>430</sup> Section 49(1)(b) of the *NEM:ICMA*.

the sustainable use of coastal resources.<sup>431</sup> The municipality must include these objectives in the CMP as well as the priorities and strategies the municipality has identified to achieve these objectives.<sup>432</sup>

The National Estuarine Management Protocol mentioned above specifies that where an estuary falls within the boundary of a municipality, the provincial environmental department must develop an EMP in consultation with affected municipalities and the relevant national government departments.<sup>433</sup> Furthermore, where an estuary is within a protected area or is identified as part of a protected area expansion strategy, the management authority responsible for the protected area must develop an EMP in consultation with relevant government departments.<sup>434</sup>

Municipalities that administer a CMP may enact by-laws for the management and implementation thereof.<sup>435</sup> However, the Act specifies that a municipality must create a by-law which designates coastal access land so that the public is able to access the space.<sup>436</sup> These by-laws must be implemented and convey the fact that no person has an unencumbered right to access coastal public property that forms a protected area.<sup>437</sup> The location of coastal access strips along with an assessment of the applicable environmental impacts of such access strips must be included in a municipality's SDF.<sup>438</sup> Prior to the designation of coastal access land, a municipality must investigate the potential environmental impacts of doing so.<sup>439</sup> Municipalities have been allocated specific responsibilities regarding coastal access land, and naturally have the executive authority to create by-laws for the implementation of these responsibilities.<sup>440</sup> Among these responsibilities are creating signposts for the entry points, controlling the use of the land and the activities allowed thereon, providing infrastructure subject to the availability of resources, and ensuring that

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<sup>431</sup> Section 49(2)(b) of the *NEM:ICMA*.

<sup>432</sup> Sections 49(2)(b) and (c) of the *NEM:ICMA*.

<sup>433</sup> Reg 5.1 of GN 341 in GG 36432 of 10 May 2013.

<sup>434</sup> Reg 5.5 of GN 341 in GG 36432 of 10 May 2013.

<sup>435</sup> Section 50 of the *NEM:ICMA*.

<sup>436</sup> Section 18(1) of the *NEM:ICMA*.

<sup>437</sup> Section 18(3)(a)(i) read together with s13(2)(a) of the *NEM:ICMA*.

<sup>438</sup> Section 21(j) of the *SPLUMA*.

<sup>439</sup> Section 19(a) of the *NEM:ICMA*.

<sup>440</sup> Section 20(2) of the *NEM:ICMA*.

the use of the land and infrastructure does not have any unfavourable impacts on the environment.<sup>441</sup>

### 2.6.2 *National Environmental Management: Biodiversity Act 10 of 2004*

The *National Environmental Management: Biodiversity Act (NEM:BA)* regulates the management and conservation of South Africa's biodiversity within the framework of the *NEMA*.<sup>442</sup> The Act aims to protect species and ecosystems that warrant national protection.<sup>443</sup>

*NEM:BA* applies to all human activities that affect the biological diversity of South Africa and is bound to all spheres of government, including the local sphere.<sup>444</sup> The Act contains provisions within the framework of the *NEMA* which municipalities must follow to protect and manage the conservation of biodiversity.<sup>445</sup> The Act also highlights the importance of co-operative governance in the efforts to manage and conserve biodiversity.<sup>446</sup> The *NEM:BA* provides that the Minister needs to prepare a national biodiversity framework, the contents of which need to allow for an integrated, co-ordinated, and uniform approach by organs of state in all spheres for the management of biodiversity.<sup>447</sup> A municipality's IDP must align with, and show how that municipality may implement, the national biodiversity framework or any other bioregional plan.<sup>448</sup> The IDP of a municipality must, moreover, take into account the need to protect listed ecosystems, as well as contain the plans for monitoring, controlling and eradicating invasive species.<sup>449</sup>

Furthermore, Chapter 3 of the *NEMA* provides that a municipality must adopt environmental management or implementation plans in its IDP.<sup>450</sup> The purpose of these plans is to consolidate the policies, plans and programmes of the various

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<sup>441</sup> Section 20(1) of the *NEM:ICMA*.

<sup>442</sup> Preamble of *NEM:BA*.

<sup>443</sup> Preamble of the *NEM:BA*

<sup>444</sup> Sections 4(1)(b), 4(2)(a), 6(1) and 7 of the *NEM:BA* read together with s2 of the *NEMA*.

<sup>445</sup> Section 2(a)(i) of the *NEM:BA*.

<sup>446</sup> Section 2(c) of the *NEM:BA*.

<sup>447</sup> Sections 38 and 39(1) of the *NEM:BA*.

<sup>448</sup> Section 48(2)(c) of the *NEM:BA*.

<sup>449</sup> Sections 54 and 76(2)(b) of the *NEM:BA*.

<sup>450</sup> Section 54 of the *NEM:BA*.

national departments that exercise functions affecting the environment with local governments to minimise the duplication of procedures and functions and to promote consistency.<sup>451</sup> These plans, therefore, are also a means to promote co-operative governance.<sup>452</sup> Thus, municipalities are essential in supporting provincial and national organs of state to implement initiatives to conserve the biodiversity of environmental areas such as estuaries.<sup>453</sup>

Municipalities play an important role in conserving biodiversity and ecosystems when their area contains important biodiversity functions, such as in the case of the Knysna Estuary.<sup>454</sup> This role originates partly from their constitutional mandate to promote a safe and healthy environment and to deliver services in an environmentally sustainable manner.<sup>455</sup> The Knysna Estuary's ecological function must remain unspoiled for the estuarine biodiversity found within it, but also for the survival of surrounding coastal ecosystems and biodiversity.<sup>456</sup>

### *2.6.3 National Environmental Management: Protected Areas Act 57 of 2003*

The *NEM:PAA* regulates the protection and conservation of ecologically viable areas representing South Africa's biological diversity, natural landscapes, and seascapes.<sup>457</sup> The Act prescribes the management of protected areas in accordance with national norms and standards.<sup>458</sup>

Authorities tasked with managing protected areas are assigned in writing by the relevant Minister or the MEC.<sup>459</sup> The Act provides for a system of protected areas in South Africa, and the applicable ones to this study are nature reserves and protected

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<sup>451</sup> Section 12(a) of the *NEMA*.

<sup>452</sup> Section 12(b) of the *NEMA*. See para 2.2.3.2.

<sup>453</sup> DFFE *White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity as Approved by Cabinet* 17.

<sup>454</sup> DFFE *White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity as Approved by Cabinet* 17.

<sup>455</sup> DFFE *White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity as Approved by Cabinet* 17.

<sup>456</sup> Strydom *et al Environmental Management in South Africa* 902. See para 1.1.

<sup>457</sup> Preamble of the *NEM:PAA*.

<sup>458</sup> Preamble of the *NEM:PAA*.

<sup>459</sup> Sections 38(1) and (2) of the *NEM:PAA*.

environments.<sup>460</sup> Before a protected area can be declared as such, the Minister or MEC must go through the necessary consultation process with, among other entities, the municipality in whose area the protected area is situated.<sup>461</sup> By including the municipality in the process, it opens the possibility of the municipality contributing to the management of the protected area.

The authorities placed in charge of managing these areas bear the responsibility of drafting and submitting a management plan for the relevant protected areas to the Minister or the MEC.<sup>462</sup> In the process of drafting this management plan, the municipality which has an interest in the area must act as a consultant for the managing authority.<sup>463</sup> When drafting the management plan due consideration must also be taken for any applicable aspects of the municipality's IDP.<sup>464</sup> This Act further cements the notion that even though the environment is not a functional area of local government, it is not exempted from contributing to environmental management through processes and plans.

## ***2.7 Legal principles, objectives, and duties for local government contribution to estuarine management***

Mainstreaming the environment means integrating environmental matters with processes, plans, and policies under local government's mandate.<sup>465</sup> Considering the environment as an integral and inseparable part of the development process is how sustainable development may be achieved.<sup>466</sup> With all the above information taken into consideration, a municipality could contribute to the management of an estuary in its jurisdiction by integrating environmental considerations into the regulation of its functions and powers. The discussion of the legislation and framework law above

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<sup>460</sup> Sections 9(a) and 9(d) of the *NEM:PAA*. Knysna Estuary forms part of the Knysna National Lakes area initially proclaimed lake area in terms of the *Lake Areas Development Act* 39 of 1975. This act was later repealed, and the area was declared a Protected Environment in terms of the *NEM:PAA*; GN R1175 in GG 32797 of 11 December 2009.

<sup>461</sup> Section 31(b)(ii) of the *NEM:PAA*.

<sup>462</sup> Section 39(2) of the *NEM:PAA*.

<sup>463</sup> Section 39(3) of the *NEM:PAA*.

<sup>464</sup> Section 39(4) of the *NEM:PAA*.

<sup>465</sup> Middleton *et al Environmental Management and Local Government* 19. This approach is adopted from the 1992 *Rio Declaration on Environment and Development*.

<sup>466</sup> Glazewski *Environmental Law in South Africa* 2-12.

showed that a municipality is subject to specific principles, objectives, and duties which they must or may adhere to when exercising their original functions and powers.<sup>467</sup> A municipality is not compelled to adhere to all these principles, objectives, and duties. However, they are geared towards positive influences on an estuary and the broader environment. Ideally, municipalities should adhere to them. Therefore, based on the assumption that the Knysna Municipality wants to achieve environmental objectives and contribute to the management of the Knysna Estuary, it will align its actions with these principles, objectives, and duties. What follows is a summary of the principles, objectives, and duties.

Description	Laws
<b>Principles</b>	
Co-operative governance between all spheres of government and organs of state	<i>Constitution</i> S41(1)(h)
	<i>NEMA</i> S12(b)
	<i>NEM:BA</i> S2(c)
Effective, transparent, accountable government	<i>Constitution</i> S41(1)(c)
Ecological sustainability:	<i>Constitution</i> S24(b)(iii)
take into account the intrinsic value and benefits of natural resources and ecosystems;	
ensure that development does not undermine the long-term persistence and resilience of biodiversity, ecosystems and ecological infrastructure;	<i>NEMA</i> S2(3)
avoid or minimise and remedy the disturbance of ecosystems and loss of biological diversity	<i>WC Biodiversity Act</i> S5(b) and (c)
Carrying capacity and ecological integrity: not using renewable resources past their available integrity	<i>NEMA</i> S2(4)(a)(vi)
Precautionary: risk-averse and cautious approach, consider limited knowledge	<i>NEMA</i> S2(4)(a)(vii)
	<i>WC Biodiversity Act</i> S6
	<i>NEMA</i> S2(4)(a)(viii)

<sup>467</sup> See para 2.2 to 2.6.

Preventative: preventative actions must be taken in such a way as to minimise environmental damage, and more specifically the pollution of water sources	<i>NWA</i> S19(1)
Best practical environmental option: integrated environmental management, decisions must lead to the most environmental benefits and the least damage	<i>NEMA</i> S2(4)(b)
Life-cycle liability: responsibility from birth to end of product, programme or service	<i>NEMA</i> S2(4)(e)
Participation: promoted for all persons with an interest and affected by environmental governance	<i>NEMA</i> S2(4)(f)
	<i>NEM:ICMA</i> 53(1)(a)
Polluter pays: carry the costs for mitigating or remedying the damage caused by pollution	<i>NEMA</i> S2(4)(p)
<b>Objectives</b>	
Use financial and administrative capacity to: promote a safe and healthy environment; prevent pollution and ecological degradation; promote conservation and achieve ecologically sustainable development	<i>Constitution</i> S152(1)(d) S24(b)(i) S24(b)(ii) S24(b)(iii) S7
	<i>Municipal Systems Act</i> S4(2)(i)
<b>Duties</b>	
Duty of care: take reasonable measures to prevent pollution or degradation	<i>NEMA</i> S28
Municipal by-laws: to manage functions and powers which influence the Knysna Estuary; to establish measures to manage the environmental impacts of urban development; any responsibilities bestowed upon a municipality with coastal access land; to regulate or restrict activities in a protected area within its jurisdiction	<i>Constitution</i> S156(2) S160(2)(a)
	<i>NEM:ICMA</i> S18(1) S20(2)
	<i>NEM:PAA</i> S49(c)
	<i>NEMA</i> S46
Exercising legislative and executive authority to manage functional areas closely related to an estuary: municipal planning, pontoons, ferries, jetties, piers, and harbours, stormwater and related infrastructure,	<i>Constitution</i> Schedules 4 and 5
	<i>Municipal Systems Act</i> S11

beaches and amusement facilities, local amenities, basic municipal services, and signposts	<i>Municipal Structures Act</i> S84
	<i>NEM:ICMA</i> S20
Adopting or implementing plans and strategies: municipal IDP must take into consideration protected ecosystems, municipal budgets must be drafted to achieve environmentally sustainable outcomes; a municipal CMP and EMP must be included in the IDP or SDF; biodiversity and protected areas management plans consistent with municipal IDP; adopt plans to eradicate, monitor and control invasive species included in IDP; stop, control and remedy pollutants entering the Knysna Estuary	<i>Constitution</i> S160(2)(b)
	<i>NEMA</i> S28
	<i>NEM:ICMA</i> S48 S49 and S51
	<i>NEM:BA</i> S43 S54 S76(2)(a)
	<i>NEM:PAA</i> S39(4)

## ***2.8 Concluding remarks***

The objective of this chapter was to examine the *Constitution*, framework local government law, framework national and provincial environmental law, and sectoral environmental law to reflect on local government's role in estuarine management. Furthermore, this chapter aimed to provide an overview of the general principles, objectives, and duties from the Constitution and statutory framework law to local government contribution to estuarine management. The relevant framework and sectoral legislation were consulted to present a mainstreamed and localised management of the environment and an estuary. The duties of municipalities have been discussed with a specific focus on duties that can contribute to the management of the Knysna Estuary. Municipalities have the administrative, legislative, and executive authority to ensure the prosperity of their key environmental areas, even if it is not provided for directly by the applicable environmental legislation. An examination of both local government and environmental legislation has corroborated this statement and furthermore specified what powers and functions the municipalities were awarded to achieve this objective. The division of duties along with the powers and functions awarded to

government created a perception of how estuarine management is currently regulated for by South Africa's legal system, and what the role of local government is therein.

An organ of state's duty to promote a safe and healthy environment allows for provisions to be interpreted to allow for a more localised environmental governance.<sup>468</sup> The direct administration of the above-mentioned SEMAs does not fall under the competency of municipalities as assigned powers, but the principal frameworks which the acts provide for must be considered by municipalities when they exercise their powers and functions, thus having regulatory application.<sup>469</sup> Furthermore, the functions and powers for the direct administration of conservation and the environment do not fall in the competency of a local municipality. However, interpretation of national legislation and past cases have set a precedent that even though it is outside their competency, they are not exempted from contributing to the management and ensuring the conservation of these areas.<sup>470</sup> Even though the Knysna Municipality does not have direct control and executive power over the Knysna Estuary, it is awarded certain environmental principles, objectives, and duties relevant to an estuary which it must or should adhere to when performing its original power.<sup>471</sup> These principles, objectives, and duties are geared towards positive influences on an estuary and the broader environment. Thus, incorporating the principles, objectives, and duties into municipal activities provides for a relatively effortless mechanism to achieve environmental objectives, and contribute to the management of an estuary.

Municipalities are also allowed by national legislation to accept responsibility for the implementation and administration of environmental plans that would further promote the protection and conservation of their key environmental areas.<sup>472</sup> This, along with the repeated specifications of co-operative governance to achieve environmental objectives, provides that municipalities have a much larger and more

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<sup>468</sup> See para 2.7.

<sup>469</sup> Paterson "Biodiversity" 19 – 31.

<sup>470</sup> See para 2.2.3.

<sup>471</sup> See para 2.2.3.

<sup>472</sup> See para 2.4 and 2.6.

integrated role to play in the management of the environment, and as such an estuary, than what is purely prescribed in the *Constitution* as functional areas of local government. For example, certain SEMAs prescribe certain frameworks, plans and policies that must be included in a municipality's IDP.<sup>473</sup> The IDP is among the set of instruments available to municipalities to advance the contribution of municipalities to estuary management. Ideally, these instruments should be aligned with the principles, objectives, and duties relevant to an estuary. These instruments are explored in chapter three.

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<sup>473</sup> Section 45(c)(vi) of *NEM:BA*.

## **CHAPTER 3      LOCAL ENVIRONMENTAL GOVERNANCE (LEG) INSTRUMENTS IN SOUTH AFRICAN LAW**

### *3.1 Introduction*

In the context of this study, "instruments" refer to the tools that managers, governors, and decision-makers use to reach a certain outcome.<sup>474</sup> South African local government is required by law to adopt instruments for its operational planning, implementation, and performance management.<sup>475</sup> These instruments help municipalities achieve objectives set in law, including environmental law.<sup>476</sup> To achieve environmental outcomes, local government can use instruments aimed at environmental management and governance, thus LEG instruments.<sup>477</sup> Municipalities may use LEG instruments at strategic, operational, and tactical levels to achieve the desired environmental outcomes.<sup>478</sup>

This chapter aims to distil and discuss the set of LEG instruments provided for in local government legislation that may be utilised for municipal contribution to estuarine management.<sup>479</sup> Certain environmental pressures affecting the Knysna Estuary are attributed to external activities over which SANParks has no power. Furthermore, these activities fall under the competency of the Knysna Municipality.<sup>480</sup> The Municipality can manage these external activities using the instruments discussed in this chapter.<sup>481</sup> Moreover, these instruments must be drafted and implemented subject to the principles, objectives, and duties identified in chapter two, based on the assumption the Municipality intends to achieve environmental objectives and contribute to the management of the Estuary.

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<sup>474</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-3.

<sup>475</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

<sup>476</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>477</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-3.

<sup>478</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-2.

<sup>479</sup> See para 1.1.

<sup>480</sup> See para 2.2.3.3.

<sup>481</sup> See chapter two.

First, this chapter provides a general overview of these instruments and the categories of which the instruments form part. The chapter also explains each instrument's role in the function of a municipality and the potential contribution to estuarine management.

### ***3.2 Overview of LEG instruments***

LEG instruments have been categorised into groups, namely compliance-based, governance-based, governing-based, incentive-based, and civil-based instruments.<sup>482</sup> Nel, Du Plessis and Retief classify the LEG instruments available in South African law as compliance-based, governance-based, governing-based, and cross-cutting instruments, which is the classification used in this discussion.<sup>483</sup>

Compliance-based instruments are utilised to ensure compliance with the legal requirements provided by national and provincial legislation.<sup>484</sup> However, these instruments are geared more toward self-regulation than being governed by others.<sup>485</sup> These categories of instruments can further be divided into subthemes for communicating the applicable environmental law and current complacency.<sup>486</sup> The subthemes include the need for a municipality to know the applicable environmental law and the status of their compliance thereof, the need to manage environmental authorisations, permits and licenses, and the potential for prosecution by governing agencies.<sup>487</sup> These instruments do not strictly facilitate compliance in terms of legislated obligations but also apply to international standards.<sup>488</sup>

Governance-based instruments are used by a municipality to control, regulate, and verify its internal activities.<sup>489</sup> Municipalities are responsible for the plans, control, and governance of their activities and processes, and the mechanisms which need

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<sup>482</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-8.

<sup>483</sup> Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-38. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-13.

<sup>484</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-13.

<sup>485</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 192.

<sup>486</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-13.

<sup>487</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-13.

<sup>488</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 192.

<sup>489</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-23. See also Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-38.

to be put in place that allow for the internal governance and evaluation of these activities.<sup>490</sup> These instruments effectively provide a municipality with guidance to adhere to principles of efficiency, transparency, and accountability.<sup>491</sup> Instruments in this category are required by local government law as well as other laws to ensure a municipality conducts its activities and processes within the parameters of good governance.<sup>492</sup>

Municipalities use governing-based instruments to regulate their communities in coordination with the powers vested in them.<sup>493</sup> These instruments are further classified as command-and-control-based, incentives and disincentives, agreement-based, rights-based, and civil-based instruments.<sup>494</sup> Municipalities use command-and-control-based instruments to govern their area of jurisdiction corresponding to their competencies.<sup>495</sup> Among these tools available to municipalities are municipal by-laws used to govern the environment as provided by the *Constitution*.<sup>496</sup> Incentive and disincentive-based instruments can be financial or non-financial, and these are based on appealing to financial self-interest in the form of penalties, such as fines or rewards such as rebates.<sup>497</sup> Agreement-based instruments are agreements entered into between governments, industry, and other organisations regulated by law for the benefit of environmental governance.<sup>498</sup> Civil-based instruments consist of interested parties such as the public, non-government organisations (NGOs), and community-based organisations (CBOs) that support the government in implementing environmental policies and laws.<sup>499</sup> Civil-based instruments can further be classified into structural-, procedural-, and other rights-

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<sup>490</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-23.

<sup>491</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-23.

<sup>492</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-24. The relevant instruments include the IDP, SDBIP and municipal budgets, which will be further discussed in paragraph 3.3.

<sup>493</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-32. See also Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-38.

<sup>494</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-32.

<sup>495</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-33.

<sup>496</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-33.

<sup>497</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-41.

<sup>498</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-44.

<sup>499</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-46.

based instruments.<sup>500</sup> Structural civil-based instruments allow for the involvement of the community by way of forums that lead to the other civil-based instruments being applied effectively.<sup>501</sup> These instruments include ward committees and municipal committees.<sup>502</sup> Procedural civil-based instruments function within the framework provided by the structural instruments.<sup>503</sup> These instruments provide for community participation as a way for civil society to be involved in the processes of a municipality, such as public participation.<sup>504</sup>

Cross-cutting instruments are the instruments that are available for a municipality to use but are not able to be classified into only one category named above.<sup>505</sup> The sub-classes of these instruments are spatially-based, co-operation-based, information-based, and specific environmental plans.<sup>506</sup>

From the above overview, it appears that the chosen set of LEG instruments, namely the IDP, municipal budget, SDBIP, public participation, section 79 and 80 committees, and ward committees, fall under the classification of governance and governing instruments. These instruments work based on the capacity and capability of the Municipality itself. Subsequently, the particular use of the instruments may indicate the extent to which the Municipality contributes to managing the Knysna Estuary when performing its mandated municipal functions.

### ***3.3 Governance-based LEG instruments***

Governance instruments are used to manage the internal functions of a municipality.<sup>507</sup> As discussed above, this study focuses on the IDP, SDBIP, and municipal budgets in this classification of instruments.<sup>508</sup> What follows is a discussion

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<sup>500</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-47.

<sup>501</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-48.

<sup>502</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-48. Ward committees and municipal committees such as section 79 and 80 committees are discussed in paragraph 3.4

<sup>503</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-49.

<sup>504</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-50. Public participation is discussed in paragraph 3.4.2.

<sup>505</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-60.

<sup>506</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-60.

<sup>507</sup> See para 3.2.

<sup>508</sup> See para 1.1, and 3.2.

on these governance-based instruments along with their basis in law and how they can potentially be applied to achieve environmental objectives.

### 3.3.1 Integrated Development Plan

The IDP is the prime strategic planning instrument used by municipalities to make decisions, and plan and manage their duties.<sup>509</sup> A municipality must adopt a "single, inclusive and strategic plan" that would be used to promote the development of the municipality in a socially, economically and environmentally sustainable fashion.<sup>510</sup> The main function of developmental planning is the realisation of local government objects the *Constitution* prescribes.<sup>511</sup> These objects include the objects of local government and fundamental human rights, which both include the duty to promote a safe and healthy environment.<sup>512</sup> The IDP informs all planning and development in a municipality, and all decisions relating thereto.<sup>513</sup> It binds the municipality to exercise its executive authority, except where the IDP is inconsistent with national or provincial legislation.<sup>514</sup> However, the effectiveness of an IDP in terms of environmental governance depends on the municipality.<sup>515</sup>

Chapter 5 of the *Municipal Systems Act* provides the general information applicable to the IDP.<sup>516</sup> The Act does not explicitly prescribe how environmental duties should be integrated into the IDP, as the framework legislation only provides the minimum requirements of what should be included in the plan.<sup>517</sup> Nevertheless, the legal mandate to develop IDPs along with the objects of local government is a strong

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<sup>509</sup> Retief and Cilliers "Municipal Integrated Development Planning" 4-3. See also Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 192.

<sup>510</sup> Section 25(1) of the *Municipal Systems Act* and s2(3) of the *NEMA*. See also Botes *Legal Protection of 'Microclimate Regulation' as an Urban Ecosystem Service in South Africa* 118.

<sup>511</sup> Section 23 of the *Municipal Systems Act*.

<sup>512</sup> Sections 152(1) and 24 of the *Constitution*.

<sup>513</sup> Section 35(1)(a) of the *Municipal Systems Act*. See also Botes *Legal Protection of 'Microclimate Regulation' as an Urban Ecosystem Service in South Africa* 65.

<sup>514</sup> *Parkhurst Village Association v Capela* 2010 JOL 25759 (GSJ) para 7.

<sup>515</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-25.

<sup>516</sup> Chapter 5 of the *Municipal Systems Act*.

<sup>517</sup> Section 26 of the *Municipal Systems Act*. The minimum requirements set out in s26 mainly refer to the development of the Municipality in a social and economic sense, the ecological pillar is not accounted for. However, this section does prescribe an applicable disaster management plan must be reflected in the IDP.

motivator for municipalities to contribute to environmental management.<sup>518</sup> The municipality has to carry out its affairs in a way that complies with commitments in its IDP.<sup>519</sup> The municipality can therefore utilise its IDP to work toward environmental goals by making it a priority in the planning and development objectives of the IDP.<sup>520</sup>

Core components of the IDP prescribed by the Act include an SDF with a land use management guideline.<sup>521</sup> This is echoed in the *SPLUMA*, which provides the inclusion of these core components as the definition of municipal planning.<sup>522</sup> The Act also states that the SDF must be included within the IDP according to the prescriptions in the *Municipal Systems Act*.<sup>523</sup> A municipality is the authority of first instance for all matters relating to land development applications.<sup>524</sup> Thus, a municipality must adopt a land use scheme which gives effect to both the SDF and IDP.<sup>525</sup> A land use scheme should aim to promote the longevity of public health, the environment, and natural resources.<sup>526</sup> The land use scheme allows for creating of spatial zones that have different developmental priorities within the municipal area.<sup>527</sup> The IDP also acts as a means of communication between the executive mayor and the municipal council on services that need to receive priority as well as estimated revenue and expenditure attributed thereto.<sup>528</sup> The Act empowers a municipality to provide its services either by an internal mechanism, or an external mechanism.<sup>529</sup> Internal mechanisms in this regard include departments and components in the municipality's administration.<sup>530</sup> External mechanisms could include community-based or non-governmental organisations that are legally

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<sup>518</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-25.

<sup>519</sup> Section 36 of the *Municipal Systems Act*.

<sup>520</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-25.

<sup>521</sup> Section 26(e) of the *Municipal Systems Act*.

<sup>522</sup> Sections 5(1)(a) and 5(1)(b) of the *SPLUMA*.

<sup>523</sup> Section 20(2) of the *SPLUMA*.

<sup>524</sup> Section 33(1) of the *SPLUMA*.

<sup>525</sup> Section 24(2)(g) of the *SPLUMA*.

<sup>526</sup> Section 25(1)(d) of the *SPLUMA*.

<sup>527</sup> Section 24(3)(b) of the *SPLUMA*.

<sup>528</sup> Section 56(2)(c) of the *Municipal Structures Act*.

<sup>529</sup> Section 76 of the *Municipal Systems Act*.

<sup>530</sup> Section 76(a) of the *Municipal Systems Act*.

competent and have entered into a service delivery agreement with the municipality.<sup>531</sup>

The *NEMA* states that it is the responsibility of the provincial government to ensure that municipalities follow relevant environmental implementation and management plans when compiling IDPs and land development objectives.<sup>532</sup> SEMAs, such as the ones discussed in chapter two, also dictate what content the IDP should hold in the form of environmental sectoral plans.<sup>533</sup> For example, the *National Environmental Management: Waste Act* 59 of 2008 (the *NEM:WA*) states that the IDP needs to contain a waste management plan.<sup>534</sup> Other municipal environmental sectoral plans that need to be included in the IDP are air quality management plans, invasive species monitoring, control and eradication plans, water services development plans, biodiversity management plans, municipal CMPs and EMPs.<sup>535</sup> The *NEM:BA* further requires municipalities to account for the need to protect listed ecosystems in its IDP.<sup>536</sup> Municipalities have to include concerns and objectives regarding coastal management in both their IDP and SDF.<sup>537</sup> Therefore, in alignment with the objectives of local government, as set out in the *Constitution*,<sup>538</sup> the IDP has the potential to encourage ecologically sustainable development.<sup>539</sup>

The IDP should provide a clear indication of what the Knysna Municipality's environmental goals in relation to the Knysna Estuary are through the inclusion of environmental management plans and should also act as a performance indicator

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<sup>531</sup> Section 76(b) *Municipal Systems Act*.

<sup>532</sup> Section 16(4)(b) of the *NEMA*.

<sup>533</sup> Du Plessis 2009 *SAPL* 95.

<sup>534</sup> Section 11(4)(a) of the *NEM:WA*.

<sup>535</sup> Section 15(2) of the *National Environmental Management: Air Quality Act* 39 of 2004 (*NEM:AQA*). See also ss76(2)(a) and 43 of *NEM:BA*, s16 of the *Water Services Act* 108 of 1997, ss34(2), 48-49 and 51 of the *NEM:ICMA*; Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-64 to 3-67.

<sup>536</sup> Section 76(3) of *NEM:BA*. See also Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 115.

<sup>537</sup> Section 42(4)(e) of the *NEM:ICMA*.

<sup>538</sup> Section 152(1)(b) of the *Constitution*.

<sup>539</sup> Botes *Protection of 'Microclimate Regulation' as an Urban Ecosystem Service in South Africa* 65. See also Van der Berg *Municipal Planning Law and Policy for Sustainable Cities in South Africa* 231.

of the implementation of those plans.<sup>540</sup> Furthermore, as the prime strategic management instrument of the Municipality, the IDP should provide an overview of development activities which have an influence on the Knysna Estuary.

### *3.3.2 Municipal budget*

A municipality exercises its executive and legislative authority when it prepares, implements, and approves its municipal budget.<sup>541</sup> The budgeting process must be structured and managed in a way that prioritises the community's basic needs, including ensuring a safe and healthy environment and, by extension, an estuary.<sup>542</sup>

A municipal council must approve an annual budget before the start of the financial year.<sup>543</sup> In preparation for the budget, the mayor must consider the objectives of the IDP.<sup>544</sup> The processes followed in drafting the IDP must be repeated when drafting the budget to ensure these two instruments coincide and are mutually credible.<sup>545</sup> It is important that the community also participates by submitting representations regarding the budget.<sup>546</sup>

Being co-ordinated with the IDP, which should reflect environmental objectives, provides the budget with environmental relevance.<sup>547</sup> The budget is the instrument that allocates predicted resources towards achieving targets as identified in the IDP and could include targets which directly or indirectly influence the Knysna Estuary.<sup>548</sup>

### *3.3.3 Service Delivery and Budget Implementation Plan*

An SDBIP is a plan which must be approved by the mayor in which a detailed outline is provided of how the municipality plans to render its services along with the costs

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<sup>540</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 190.

<sup>541</sup> Section 11(3)(h) of the *Municipal Systems Act*.

<sup>542</sup> Section 153(a) of the *Constitution*. See para 2.2.1.

<sup>543</sup> Sections 16(1) and 24(2) of the *MFMA*.

<sup>544</sup> Section 21(2)(a) of the *MFMA*.

<sup>545</sup> Section 21(1)(a) of the *MFMA*.

<sup>546</sup> Section 22(a)(ii) of the *MFMA*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-50.

<sup>547</sup> See para 3.2.

<sup>548</sup> Enaifoghe 2022 *AJDS* 111.

attributed thereto.<sup>549</sup> These services rendered include environmental services.<sup>550</sup> This plan must indicate the expected expenditure and income by source, as well as the targeted delivery of services and performance indicators.<sup>551</sup> In a sense, the SDBIP acts as a contract between a municipality's administration, council, and the community.<sup>552</sup> It provides an overview of what services the municipality will be delivering and also provides performance and progress beacons to be followed.<sup>553</sup> In other words, the SDBIP is the link between the planned activities set out in the IDP and the actual implementation thereof.<sup>554</sup> Thus, environmental consideration has to start with the IDP and the SDBIP acts as the implementation. SDBIPs monitor and align the targets derived from the IDP to a municipality's budget.<sup>555</sup> A municipality's SDBIP has no legal weight or authority if it is not accompanied by the municipal budget.<sup>556</sup> Therefore, if a municipality does include environmental objectives in the IDP, the SDBIP cannot contribute to the implementation of activities which would achieve environmental objectives.

### ***3.4 Governing-based LEG instruments***

As discussed above, governing-based LEG instruments are geared towards managing both the communities and the geographical areas under a municipality's jurisdiction.<sup>557</sup> What follows is a broad discussion of what the governing-based instruments are, their basis in law, and the environmental application they can lend themselves to.

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<sup>549</sup> Section 1 of the *MFMA*. See also May and Agenbag "Environmental Health and Municipal Health Services" 15-64.

<sup>550</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-26.

<sup>551</sup> Section 1 of the *MFMA*.

<sup>552</sup> Khalo "Municipal Financial Management" 225.

<sup>553</sup> Khalo "Municipal Financial Management" 225.

<sup>554</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 279.

<sup>555</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 190.

<sup>556</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 279.

<sup>557</sup> See para 3.2.

### 3.4.1 By-laws

Creating by-laws is a constitutionally entrenched power and function of local government.<sup>558</sup> Municipalities may make and administer by-laws for the matters which they are permitted to administer as set out in schedules 4B and 5B of the *Constitution*.<sup>559</sup> The *Municipal Systems Act* further provides that municipalities exercise their legislative authority when passing by-laws and making decisions regarding matters such as promoting a safe and healthy environment.<sup>560</sup> By-laws may not be passed without reasonable notice to all the members of a municipal council and without being published for public comment.<sup>561</sup> The by-laws only become enforceable once they have been published in the relevant provincial gazette.<sup>562</sup> By-laws created by a municipality must be open to the public for viewing, thereby facilitating public participation.<sup>563</sup>

If a municipality does not have the necessary capacity to make or contract a specialist to formulate by-laws, it can adopt standard draft by-laws generated by other organs of state.<sup>564</sup> Sector legislation also provides for municipal law-making authority to create by-laws that address specific environmental matters.<sup>565</sup> For example, the *NEM:ICMA* provides that a municipality may make by-laws to administer its coastal management programme.<sup>566</sup> Model by-laws in terms of the *NEMA* may be adopted by a municipality as municipal by-laws.<sup>567</sup>

Municipal by-laws, therefore, may serve as a means to realise environmental objectives.<sup>568</sup> The by-laws regulate the Knysna Municipality's functional areas that have environmental implications.<sup>569</sup> Furthermore, framework environmental law and

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<sup>558</sup> Section 156(2) of the *Constitution*.

<sup>559</sup> Section 156(2) of the *Constitution*.

<sup>560</sup> Sections 11(3)(m) and (l) of the *Municipal Systems Act*.

<sup>561</sup> Section 160(4) of the *Constitution*.

<sup>562</sup> Section 162(1) of the *Constitution*.

<sup>563</sup> Section 162(3) of the *Constitution*.

<sup>564</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-35.

<sup>565</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-35.

<sup>566</sup> Section 50 of the *NEM:ICMA*. See also para 2.6.1.

<sup>567</sup> See para 2.4.1.

<sup>568</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-41.

<sup>569</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-34. See also para 2.2.3.3.

sectoral environmental law prescribe the adoption of municipal by-laws to administer environmental matters and open the possibility of the Municipality contributing to the management of the Knysna Estuary.<sup>570</sup>

### *3.4.2 Public participation*

One of the objects of local government is to encourage their communities to participate in the matters of local government.<sup>571</sup> A municipality is compelled to create the appropriate channels and processes through which the public is allowed to provide input into its affairs, such as the creation of the IDP, the preparation of its budget, and the feedback on its performance and service delivery.<sup>572</sup> The municipality must communicate the channels and processes along with any corresponding rights the public may have regarding the matters to be participated in.<sup>573</sup> Public participation is encouraged when drafting a municipal SDF which, as already discussed, also influences the Knysna Estuary.<sup>574</sup> Sector environmental legislation, such as the *NEM:WA* and *NEM:AQA*, calls for public participation before the adoption of related by-laws.<sup>575</sup> Furthermore, the *NEM:ICMA* prescribes that a municipality must facilitate public participation before designating or withdrawing the designation of coastal access land.<sup>576</sup>

All persons are affected by the environment and the governance thereof, thus, all persons should be allowed to be included in matters of environmental governance.<sup>577</sup> People must be given the opportunity to develop sufficient understanding, skills, and capacity needed to grasp the value of their participation.<sup>578</sup> Persons affected by the Knysna Estuary's ecological state should be included in matters of its governance

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<sup>570</sup> See para 2.4.1 and 2.6.1,

<sup>571</sup> Section 152(1)(e) of the *Constitution*.

<sup>572</sup> Section 16(1)(a) of the *Municipal Systems Act*.

<sup>573</sup> Section 18(1) of the *Municipal Systems Act*.

<sup>574</sup> Section 20(3)(b) of the *SPLUMA*.

<sup>575</sup> Section 9(5) of the *NEM:WA* and s11(4) of the *NEM:AQA*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-51.

<sup>576</sup> Sections 19, and 53 of the *NEM:ICMA*.

<sup>577</sup> Section (2)(4)(f) of the *NEMA*.

<sup>578</sup> Section (2)(4)(f) of the *NEMA*.

and must be notified of their right to do so, as well as be furnished with the necessary information.

### *3.4.3 Section 79 and 80 committees*

The *Municipal Structures Act* makes provision for structures within a municipality such as portfolio chairpersons of section 79 and 80 committees.<sup>579</sup> As the name suggests, section 79 and 80 committees are municipal committees that have been established in terms of sections 79 and 80 of the *Municipal Structures Act*.<sup>580</sup> Both section 79 and 80 committees are established by the municipal council from among its members, while section 80 committee chairpersons are chosen by the executive mayor or executive committee from either the executive committee or the mayoral committee.<sup>581</sup>

Section 80 committees are established in accordance with section 79 and they serve as assistance to executive committees or executive mayors.<sup>582</sup> Section 79 committees are established as advisory committees to support the efficient and effective performance of the municipal council's powers or functions.<sup>583</sup> Therefore, section 80 committees are not municipal council committees, and if the municipality does not have an executive committee or executive mayor, section 80 would not be applicable.<sup>584</sup>

The members of section 79 committees may be appointed from the members of the municipal council, however, advisory members from the local community may also form part of these committees and could include experts from the environmental sphere.<sup>585</sup> The municipal council acts as the governing authority over these committees as they have the responsibility of establishing the functions of these

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<sup>579</sup> Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-20.

<sup>580</sup> Sections 79 and 80 of the *Municipal Structures Act*.

<sup>581</sup> Sections 71(1)(a), 80(1) and 80(3) and of the *Municipal Structures Act*.

<sup>582</sup> Section 80(1) of the *Municipal Structures Act*.

<sup>583</sup> Sections 80(1) and 79(1)(a) of the *Municipal Structures Act*.

<sup>584</sup> Sections 79 and 80 of the *Municipal Structures Act*.

<sup>585</sup> Sections 79(1)(b) and 79(2)(d) of the *Municipal Structures Act*. See also Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-48.

committees.<sup>586</sup> The municipal council also is responsible for delegating powers and duties and appointing the chairperson of these committees.<sup>587</sup> However, the *Constitution* prohibits the delegation of certain matters such as passing by-laws, the approval of budgets, and the approval or amendment of the IDP.<sup>588</sup>

Section 80 states that the executive committee or executive mayor acts as the governing authority over the assisting committees.<sup>589</sup> It is the responsibility of the executives to delegate the powers and duties to these assisting committees.<sup>590</sup> Even though the powers and duties are delegated to these assistant committees, the executives still have a responsibility to ensure their proper performance.<sup>591</sup> Despite these committees falling within the category of governing instruments, they do not directly govern.

These auxiliary committees enable a municipality to achieve more efficient administration of their functions and powers, which depending on the objectives displayed by the IDP, could include environmental objectives relating to the Knysna Estuary.<sup>592</sup> Therefore, their auxiliary nature holds value in achieving the possible environmental objectives relating to estuaries.

#### 3.4.4 Ward committees

Wards are segments of a municipality represented by ward councillors on the municipal council.<sup>593</sup> The main object of ward committees is to improve participatory democracy within a municipality and act as the mechanism for facilitating public participation.<sup>594</sup> It is prescribed in the *Municipal Structures Act* that ward committees must consist of the ward councillor, who acts as the chairperson, along with no more than 10 other persons.<sup>595</sup> The goal of this provision is to ensure that the rules

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<sup>586</sup> Section 79(2)(a) of the *Municipal Structures Act*.

<sup>587</sup> Sections 79(2)(b) and (c) of the *Municipal Structures Act*.

<sup>588</sup> Sections 160(2)(a) and (b) of the *Constitution*.

<sup>589</sup> Section 80(3) of the *Municipal Structures Act*.

<sup>590</sup> Sections 80(3)(a) and 80(3)(b) of the *Municipal Structures Act*.

<sup>591</sup> Section 80(3)(c) of the *Municipal Structures Act*.

<sup>592</sup> See para 3.4.1.

<sup>593</sup> Section 157(2)(b) of the *Constitution*.

<sup>594</sup> Section 72(3) of the *Municipal Structures Act*.

<sup>595</sup> Section 73(2) of the *Municipal Structures Act*.

and regulations which allow for the representation of diverse interests of the ward are followed when appointing members.<sup>596</sup>

A ward committee must make recommendations regarding their presiding ward either to or through the councillor to the local council or the executive mayor or executive committees.<sup>597</sup> The recommendations ward committees may make include matters relating to sustainability, matters of environmental degradation or the responsible use of natural resources.<sup>598</sup> Ward committees also have powers and duties as delegated to them by section 59 of the *Municipal Systems Act*.<sup>599</sup> This section explains that these delegation systems in municipal councils have the main function of maximising administrative and operational efficiency.<sup>600</sup> Ward committees have limited powers in terms of a municipality's functions and powers, as this remains the duty of the municipal council.<sup>601</sup> Functions which may not be delegated to ward committees relevant to this study include the passing of by-laws and the approval of budgets.<sup>602</sup> While ward committees may not exercise these functions to contribute to the management of the Knysna Estuary, they may make recommendations to the municipal council to implement changes derived from their ward that would influence the Knysna Estuary.

### ***3.5 Concluding remarks***

This chapter discussed the LEG instruments as provided in South African law that may be utilised generally for municipal contribution to estuarine management. An overview of the instruments was provided along with how a municipality may employ them for the application of environmental governance. The identified set of instruments this study focused on, namely the IDP, municipal budget, SDBIP, by-laws, public participation, section 79 and 80 committees, and ward committees, were categorised according to the available literature. As such, the discussion

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<sup>596</sup> Section 73(3)(a)(ii) of the *Municipal Structures Act*.

<sup>597</sup> Sections 74(a)(i) and (ii) of the *Municipal Structures Act*.

<sup>598</sup> Nel, Du Plessis and Retief "Key Elements for Municipal Action" 2-23.

<sup>599</sup> Section 59 of the *Municipal Systems Act*.

<sup>600</sup> Section 59 of the *Municipal Systems Act*.

<sup>601</sup> Section 59 of the *Municipal Systems Act*.

<sup>602</sup> Sections 160(2)(a) and (b) of the *Constitution*.

conceptualised a better understanding of why these instruments are suited for this study.

The LEG instruments under consideration in this study are all intertwined with each other, and the boundaries between them are fluid.<sup>603</sup> The IDP informs all the activities of a municipality with regard to planning and development.<sup>604</sup> The IDP and budgeting process need to be aligned with each other, in other words, the service delivery, performance, and financial objectives the IDP accounts for also need to be reflected in the budget of the municipality.<sup>605</sup> The strategic objectives and priorities derived from the IDP drive the draft budget used in the public participation process.<sup>606</sup> The IDP and the budget must mirror and reinforce each other.<sup>607</sup> The SDBIP acts as the implementation instrument for the budget and as a mechanism to regulate the internal LEG instruments.<sup>608</sup> Public participation, on the other hand, is mandated by the *Constitution* and utilised by municipalities to inform and support their decisions and processes.<sup>609</sup> Section 79 and 80 committees are auxiliary in carrying out the objectives of the IDP, and ward committees are structural instruments which may facilitate public participation.<sup>610</sup>

It is evident from the above that the IDP is the starting point for implementing environmental considerations into all municipal activities. The IDP has the potential to further facilitate environmental governance by way of including environmental objectives.<sup>611</sup> By including advanced environmental objectives in the IDP, it should theoretically flow into the other instruments as well. This suggests that the inclusion

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<sup>603</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-3.

<sup>604</sup> Osiele *Municipal Planning Law for Climate Change Mitigation in South African Cities* 42.

<sup>605</sup> Knox-Mosdell and Coetzee "Processes for Action on Utilities and Environmentally Related Projects" 27-13.

<sup>606</sup> Knox-Mosdell and Coetzee "Processes for Action on Utilities and Environmentally Related Projects" 27-13.

<sup>607</sup> Knox-Mosdell and Coetzee "Processes for Action on Utilities and Environmentally Related Projects" 27-13.

<sup>608</sup> Du Plessis *Fulfilment of South Africa's Constitutional Environmental Right in the Local Government Sphere* 199; Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 163.

<sup>609</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 7 and 43.

<sup>610</sup> Karsten *Local Government Accountability in South Africa: An Environmental Law Reading* 208.

<sup>611</sup> See para 3.3.1.

of environmental objectives into the IDP is critical. The relation between the instruments further cements the prospect of using them as a set.<sup>612</sup>

LEG instruments should assist municipalities in their environmental governance efforts.<sup>613</sup> There are no limitations to what can be included in a municipal IDP, and municipalities are constitutionally mandated to exercise their powers and functions in an environmentally sustainable way and to promote a safe and healthy environment.<sup>614</sup> The success of LEG instruments depends on a municipality's ability and political will to use them to their full potential.<sup>615</sup> Therefore, it is in the hands of the Knysna Municipality to wield its LEG instruments to achieve environmental outcomes and, through this, contribute to the management of the Knysna Estuary.

Chapter four will critically review the specific LEG instruments of the Knysna Municipality and determine whether and how these instruments are used to contribute to the Knysna Estuary's management. This will be achieved by determining if and how the instruments align with the principles, objectives, and duties for local government contribution to estuarine management are met.<sup>616</sup>

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<sup>612</sup> See para 3.2.

<sup>613</sup> See para 1.1.

<sup>614</sup> See para 2.2.1.

<sup>615</sup> Nel, Du Plessis and Du Plessis "Instruments for Local Environmental Governance" 3-5.

<sup>616</sup> See para 2.7.

## **CHAPTER 4      KNYSNA MUNICIPALITY'S LEG INSTRUMENTS CONTRIBUTING TO ESTUARINE MANAGEMENT**

### *4.1 Introduction*

As indicated in chapter one of this study, contribution to estuarine management may be particularly important for the Knysna Municipality considering it has an estuary of significant conservational importance.<sup>617</sup> The previous chapter described the LEG instruments available to municipalities that can be used to achieve environmental objectives.<sup>618</sup>

This chapter aims to critically review the specific relevant LEG instruments of the Knysna Municipality and determine whether and how these instruments are used to contribute to the management of the Knysna Estuary. A detailed overview of the Knysna Municipality's LEG instruments and their content will be provided. This will be done to review the Municipality's alignment with the applicable principles, objectives and duties for local government contribution to estuarine management.<sup>619</sup> The discussion will, as far as possible and to the extent that the present research method allows, consider the Knysna Municipality's intentions as well as the execution of objectives. However, the discussion only relies on what is communicated by the available documentation representing the instruments. The instruments discussed have been selected based on the discussion in chapter three and from what is publicly available by Knysna Municipality.<sup>620</sup>

### *4.2 A review of Knysna Municipality's LEG instruments*

#### *4.2.1 Integrated Development Plan*

Knysna Municipality must adhere to the principle of ecologically sustainable development.<sup>621</sup> As the primary strategic instrument used for making decisions

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<sup>617</sup> See chapter one.

<sup>618</sup> See chapter three.

<sup>619</sup> See chapter two.

<sup>620</sup> See para 3.2.

<sup>621</sup> See para 2.7 and para 2.2.1.

regarding planning and development in the Municipality's area, the IDP can contribute to the realisation of ecologically sustainable development.<sup>622</sup> Furthermore, given the interrelated nature of the LEG instruments, the IDP is the starting point for implementing environmental considerations into all municipal activities.<sup>623</sup> In order to achieve this outcome, environmental objectives must form part of a municipality's IDP to become a priority and, as such, be visible in the plans and decisions made.<sup>624</sup> Ideally, Knysna Municipality's IDP should contain a synopsis of the Municipality's decisions, plans, and approach to managing its environmental duties.<sup>625</sup> In 2023, the Municipality was in the process of developing a new five-year IDP for the years 2023 to 2028, where a draft version was tabled to the council in March of 2023.<sup>626</sup> The final version was published in May of 2023.<sup>627</sup>

#### *4.2.1.1 Exposition*

##### 4.2.1.1.1 Basic municipal services challenges

The population of the Knysna municipal area was around 76 587 in 2022 and is estimated to grow to 80 391 in 2026.<sup>628</sup> The increasing population places a greater demand on the Municipality to provide basic municipal services.<sup>629</sup> However, the Municipality's has a shortage of critical skills leading to long-standing municipal vacancies, and an inability to effectively and efficiently provide basic municipal services.<sup>630</sup> A lack of basic municipal services impacts people's quality of life and puts their health and the environment at risk.<sup>631</sup> If the Municipality is incapable of providing adequate basic municipal services and keeping up with the population increase, the Knysna Estuary is at risk.<sup>632</sup>

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<sup>622</sup> See para 3.3.1.

<sup>623</sup> See para 3.5.

<sup>624</sup> See para 3.3.1.

<sup>625</sup> See para 3.3.1.

<sup>626</sup> Knysna Municipality date unknown <https://tinyurl.com/ysyx43pm>.

<sup>627</sup> Knysna Municipality date unknown <https://tinyurl.com/ysyx43pm>.

<sup>628</sup> Knysna Municipality *2023 Integrated Development Plan* 16.

<sup>629</sup> Knysna Municipality *2023 Integrated Development Plan* 16.

<sup>630</sup> Knysna Municipality *2023 Integrated Development Plan* 16.

<sup>631</sup> See para 2.3.1.

<sup>632</sup> See para 2.3.1.

The Municipality is facing unique environmental challenges impacting the Knysna Estuary.<sup>633</sup> It is acknowledged that the runoffs originating from the urban areas contribute to the pollution of the Knysna Estuary.<sup>634</sup> It is furthermore acknowledged that the pollution is detrimental to the economy and degrades endangered marine flora and fauna.<sup>635</sup> Factors that contribute to the pollution of the Estuary include pollution arising from informal settlements and the lack of wastewater disposal systems, leaks and blockages in stormwater infrastructure, leaking septic tanks, failing wastewater treatment plants, and the illegal disposal of chemicals in stormwater runoffs.<sup>636</sup> The treatment works are described as "overburdened", suggesting that the growing population is a contributing factor to the failure in operation.<sup>637</sup>

#### 4.2.1.1.2 Climate change and environmental matters

The Knysna Estuary Pollution Committee was formed in 2009 and is made up of SANParks, the Garden Route District Municipality, the Knysna Municipality, the Western Cape Government Department of Environment and Development Planning, and the Breede Gouritz Catchment Management Agency.<sup>638</sup> The Municipality acknowledges climate change as an environmental challenge and mentions starting a priority project to develop a Climate Change Adaptation Plan.<sup>639</sup>

Climate change plays a crucial role in the Municipality's water supply problems.<sup>640</sup> It is also a detrimental factor for the Knysna Estuary directly and any matter aimed at mitigating climate change could benefit the Estuary.<sup>641</sup> The IDP mentions a plan

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<sup>633</sup> Knysna Municipality *2023 Integrated Development Plan* 20.

<sup>634</sup> Knysna Municipality *2023 Integrated Development Plan* 20.

<sup>635</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 109.

<sup>636</sup> Knysna Municipality *2023 Integrated Development Plan* 20. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 107.

<sup>637</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 107.

<sup>638</sup> Knysna Municipality *2023 Integrated Development Plan* 20. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 111.

<sup>639</sup> Knysna Municipality *2023 Integrated Development Plan* 21. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 111.

<sup>640</sup> Knysna Municipality *2023 Integrated Development Plan* 26. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>641</sup> See para 1.1.

using wetland restoration as a way to mitigate the effects of climate change.<sup>642</sup> Wetlands provide key ecological services during times of floods and droughts,<sup>643</sup> such as slowing down the rapid flow of water during flooding, and also retaining water during dry spells.<sup>644</sup> In addition to the flood attenuation of wetlands, they are also a vital component to the functionality and resilience of natural systems such as the Knysna Estuary.<sup>645</sup>

Knysna is a water-scarce area, which is exacerbated by climate change which causes decreased rainfall and affects the municipal area's main raw water source.<sup>646</sup> Furthermore, the Municipality's ability to provide water as a basic service is compromised by factors such as load-shedding, the location of their waterworks plants, and vandalism of infrastructure.<sup>647</sup> Some of the waterwork plants are located in high-lying areas, making it costly to pump water to the plant.<sup>648</sup> The water supply is an ongoing problem and, as a result, level 3 water restrictions have been implemented across the greater Knysna Municipality area.<sup>649</sup> Knysna lists ten water schemes ranging from storage dams to desalination plants, as well as reverse osmosis plants, as a means to combat the water crisis.<sup>650</sup> Originally the Sedgefield Desalination Plant was put into preservation mode due to financial constraints and a lack of need for its use, but it later fell into disrepair and is now scheduled to be scrapped altogether.<sup>651</sup> The IDP mentions efforts to aid in the water supply including investigating the option of future sanitation infrastructure developments and constructing existing sanitation infrastructure for new developments to reach better effluent quality.<sup>652</sup> Water management and sanitation infrastructures are among the

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<sup>642</sup> Knysna Municipality *2023 Integrated Development Plan* 22. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 108.

<sup>643</sup> Knysna Municipality *2023 Integrated Development Plan* 22.

<sup>644</sup> Knysna Municipality *2023 Integrated Development Plan* 22.

<sup>645</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 108.

<sup>646</sup> Knysna Municipality *2023 Integrated Development Plan* 26. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>647</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>648</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>649</sup> Knysna Municipality *2023 Integrated Development Plan* 26.

<sup>650</sup> Knysna Municipality *2023 Integrated Development Plan* 26. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>651</sup> Knysna Municipality *2023 Integrated Development Plan* 197. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 85.

<sup>652</sup> Knysna Municipality *2023 Integrated Development Plan* 27.

listed issues that need to be prioritised to ensure water security in light of the increasing population of the area.<sup>653</sup> The Municipality acknowledges that the infrastructure in the area, which includes those relevant to water and sanitation, needs to be maintained to ensure the Knysna Estuary is not compromised.<sup>654</sup> Furthermore, the IDP highlights the problem of water scarcity and the water demand quickly outgrowing the supply, which is why the Municipality is considering increasing the water storage capacity at the dam in the Knysna River, the main source of freshwater in the Knysna Estuary.<sup>655</sup>

#### 4.2.1.1.3 Spatial development

Knysna Municipality's Spatial Development Strategies listed in the IDP include placing the integrity of its environmental assets, as well as its economic assets, central in its attempt to manage risks and safeguard resilience.<sup>656</sup> The objective of this strategy is to ensure land use and settlement growth are directed and managed to protect and rehabilitate the functionality of Knysna's environmental services and systems.<sup>657</sup> Despite this, Knysna struggles with uncontrolled settlements which inevitably contribute to the Knysna Estuary's pollution issues.<sup>658</sup>

Knysna has declared certain commitments to achieve the objective of creating a healthy natural environment.<sup>659</sup> These commitments include maintaining the municipal gardens and sports facilities and cutting the grass monthly to ensure all open spaces are neat and well-maintained.<sup>660</sup> These commitments resemble beautification attempts, rather than promoting environmental health, and the Knysna Estuary is not included in this section.

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<sup>653</sup> Knysna Municipality *2023 Integrated Development Plan* 38.

<sup>654</sup> Knysna Municipality *2023 Integrated Development Plan* 42.

<sup>655</sup> Knysna Municipality *2023 Integrated Development Plan* 42. See para 1.1.

<sup>656</sup> Knysna Municipality *2023 Integrated Development Plan* 43. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 133.

<sup>657</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 133.

<sup>658</sup> Knysna Municipality *2023 Integrated Development Plan* 119.

<sup>659</sup> Knysna Municipality *2023 Integrated Development Plan* 145.

<sup>660</sup> Knysna Municipality *2023 Integrated Development Plan* 145.

In its SDF the Municipality states that ecological systems are integral to and inseparable from the infrastructure system that services the municipal area.<sup>661</sup> The rivers in Knysna have the dual function of supplying the Municipality with water, and also transporting treated wastewater away which eventually ends up in low-lying water sources such as the Knysna Estuary and the ocean.<sup>662</sup> The ocean is also a source of water where the process of desalination is possible.<sup>663</sup> Therefore the rivers' and the sea's health is extremely important to the security of water supply in the municipal area.<sup>664</sup> Furthermore, the health of the rivers is critical for the functioning of ecosystem services, such as wetlands and the Knysna Estuary, which contribute to increased land value and desirability of owning property in the area, therefore contributing to municipal revenue.<sup>665</sup>

The SDF framework emphasises that properly functioning bulk infrastructure is important to the health of the environmental systems.<sup>666</sup> Improper maintenance of this infrastructure compromises the amenity value of the environmental systems and, in turn, the economy.<sup>667</sup> Malfunctioning wastewater treatment plants, roads, and stormwater infrastructure will allow polluted runoffs to flow directly into the wetlands, the Knysna Estuary and the ocean.<sup>668</sup> The Municipality is experiencing significant backlogs in upgrading the above-mentioned infrastructure, directly leading to the pollution of the Knysna Estuary, consequently impacting the ecosystem and economy negatively.<sup>669</sup>

The SDF expresses the Municipality's intention to prohibit any new development rights below the 5-metre contour line of the Knysna Estuary.<sup>670</sup> It is acknowledged that this contour represents a buffer zone for the Knysna Estuary to retreat to and

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<sup>661</sup> Annexure C of the 2023 IDP, and Annexure 11 of the 2017 IDP are the Municipal Spatial Development Framework; Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>662</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>663</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>664</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>665</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>666</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>667</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>668</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>669</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>670</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 31.

estuarine biota to survive in the event that climate change increases the sea level.<sup>671</sup> Where there are existing property rights and the property owners choose to exercise those rights, the state will not be held responsible for any risk.<sup>672</sup>

The SDF contains a proposed future project to create a neighbourhood centre in the vicinity of the Bongani Wetlands.<sup>673</sup> The driving force seems to be not only the need for an additional neighbourhood centre, but also to improve the ecological services provided by the Bongani Wetlands.<sup>674</sup> The Bongani River system is credited with extremely high pollution levels flowing into the Knysna Estuary.<sup>675</sup> Rehabilitating the wetland and riparian zone will mitigate flooding and contribute to the reduction of pollutants entering the Knysna Estuary.<sup>676</sup> Reportedly, the centre should be developed around low-impact economic opportunities drawing benefits from being located in a natural, highly visible, and aesthetically pleasing site.<sup>677</sup> Their motivation for this centre is to provide economic possibilities in the form of a venue for events or a business tourism facility with low environmental impacts.<sup>678</sup>

#### 4.2.1.1.4 Strategic objectives

Knysna's IDP declares that one of its strategic objectives is to improve and maintain current basic service delivery through infrastructure development.<sup>679</sup> This strategic objective has corresponding priorities including sanitation, electricity, stormwater management, integrated human settlements, and water supply.<sup>680</sup> The Knysna Estuary's pollution is listed as a challenge under sanitation services.<sup>681</sup> Reportedly the Municipality has found it challenging to achieve an efficient effluent quality

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<sup>671</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 31.

<sup>672</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 31.

<sup>673</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>674</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>675</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>676</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>677</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>678</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 52.

<sup>679</sup> Knysna Municipality *2023 Integrated Development Plan* 50.

<sup>680</sup> Knysna Municipality *2023 Integrated Development Plan* 50.

<sup>681</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 90.

control programme that would minimise the risk of pollution in the Knysna Estuary.<sup>682</sup>

The Municipality's ability to supply water as a basic service delivery is accompanied by certain challenges.<sup>683</sup> The growing population increases water scarcity.<sup>684</sup> Furthermore, the Municipality is experiencing financial constraints and reportedly does not have the budget to alleviate the water supply backlogs.<sup>685</sup> Not one of the water treatment systems in the Knysna Municipality has a Blue Drop status, and the Municipality is heavily dependent on the rivers and groundwater abstraction for freshwater supply.<sup>686</sup> These sources are facing a shortage due to the abnormal rainfall patterns caused by climate change.<sup>687</sup>

The IDP names possible solutions to these water supply challenges, namely maintaining municipal water assets within the parameters of their budget constraints to extend the asset's lifespan.<sup>688</sup> Another possible solution is to increase the current water management capacity to allow sustainable water provision.<sup>689</sup> The Municipality attempted to mitigate matters and ensure water security by upgrading two of its pumping stations in the 2020/2021 period and also embarked on a feasibility study of a new dam at Kruisvallei.<sup>690</sup> While the dam is good news for the water security of the town, it may be problematic for the Knysna Estuary, as the

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<sup>682</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 90.

<sup>683</sup> Knysna Municipality *2023 Integrated Development Plan* 116.

<sup>684</sup> Knysna Municipality *2023 Integrated Development Plan* 117.

<sup>685</sup> Knysna Municipality *2023 Integrated Development Plan* 117.

<sup>686</sup> Knysna Municipality *2023 Integrated Development Plan* 117. The Blue Drop process measures and compares the results of the performance of water service authorities and their providers, and subsequently rewards or penalises the Municipality upon evidence of their excellence or failures according to the minimum standards or requirements that have been defined.

<sup>687</sup> Knysna Municipality *2023 Integrated Development Plan* 117.

<sup>688</sup> Knysna Municipality *2023 Integrated Development Plan* 117.

<sup>689</sup> Knysna Municipality *2023 Integrated Development Plan* 117. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 142.

<sup>690</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 86. Due to a lack of information, it is unclear whether the dam planned in Kruisvallei will obstruct any water flowing into the Knysna Estuary. Nonetheless, given the proximity of Kruisvallei to the Knysna River's tributaries, it possibly could impact the Estuary.

freshwater inflow is already in a sensitive state, and any other obstructions on the river system could increase the negative effects.<sup>691</sup>

Integrated human settlements fall in the ambit of the above-mentioned strategic objective.<sup>692</sup> Due to the increasing population in the area, The Municipality is facing challenges regarding the supply of adequate housing.<sup>693</sup> The increased population increases the demand for affordable housing for people in the lower income bracket.<sup>694</sup> There is limited availability of suitable land on which to develop human settlements.<sup>695</sup> This has led to people settling on municipal and SANRAL-owned land, over which the relevant authorities have no control.<sup>696</sup> This land on which the settlements are built does not have the proper infrastructure for the provision of basic services, such as sanitation and waste disposal, leading to waste being discarded improperly and eventually flowing into the Knysna Estuary.<sup>697</sup> Consequentially, urban expansion has been negatively impacting the sensitive natural system of the Knysna Estuary.<sup>698</sup> The Municipality plans to combat these challenges by conducting an audit of all state-owned land to be earmarked for settlement development, as well as updating informal settlements where possible.<sup>699</sup>

Another strategic objective listed in the IDP is to promote a safe and healthy environment through the protection of natural resources.<sup>700</sup> Environmental conservation is listed as a focus area.<sup>701</sup> It is acknowledged that there is a need for

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<sup>691</sup> See para 1.1.

<sup>692</sup> Knysna Municipality *2023 Integrated Development Plan* 118.

<sup>693</sup> Knysna Municipality *2023 Integrated Development Plan* 118. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 144.

<sup>694</sup> Knysna Municipality *2023 Integrated Development Plan* 118. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 144.

<sup>695</sup> Knysna Municipality *2023 Integrated Development Plan* 118. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 144.

<sup>696</sup> Knysna Municipality *2023 Integrated Development Plan* 119. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 144.

<sup>697</sup> Knysna Municipality *2023 Integrated Development Plan* 116. See also Knysna Municipality *2023 Integrated Development Plan* 20.

<sup>698</sup> Knysna Municipality *2023 Integrated Development Plan* 119. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 144.

<sup>699</sup> Knysna Municipality *2023 Integrated Development Plan* 119.

<sup>700</sup> Knysna Municipality *2023 Integrated Development Plan* 121. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 68.

<sup>701</sup> Knysna Municipality *2023 Integrated Development Plan* 121. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 147.

hazard mitigation and long-term rehabilitation of the natural landscape due to the accumulating disasters the area has faced in recent years.<sup>702</sup> Alien invasive species have also become a widespread problem.<sup>703</sup> This strategic objective only seems to apply to the landscape and does not include the Knysna Estuary.

The Municipality plans to implement intervention plans to combat these challenges. These plans include a comprehensive Climate Change Adaptation Strategy and becoming proactive in mitigating the potential risk of environmental disasters.<sup>704</sup> The IDP also lists the implementation of an alien vegetation eradication programme on state and private land as a combative measure.<sup>705</sup> They also list a proposed initiative, Mission: Zero Waste, however, the IDP does not provide the details of this initiative or how it concerns the Knysna Estuary.<sup>706</sup>

The IDP mentions a project implemented in 2022 as an intervention to the Knysna Estuary's pollution.<sup>707</sup> Thirty women were employed for the River Health Project to regularly clear solid waste from the streams flowing into the Knysna Estuary.<sup>708</sup> The project's recorded timeframe was from 2022 to 2050, however, there is no further feedback on this project, and the outcome thereof is unknown.<sup>709</sup>

#### 4.2.1.1.5 Environmental management plans

There are environmental plans which the Municipality may take responsibility for implementing and administering.<sup>710</sup> Knysna added the Air Quality Management Plan, and the Water Services Development Plan as annexures to its 2023 IDP, neither of

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<sup>702</sup> Knysna Municipality *2023 Integrated Development Plan* 121.

<sup>703</sup> Knysna Municipality *2023 Integrated Development Plan* 121.

<sup>704</sup> Knysna Municipality *2023 Integrated Development Plan* 130. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 146.

<sup>705</sup> Knysna Municipality *2023 Integrated Development Plan* 130. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 146.

<sup>706</sup> Knysna Municipality *2023 Integrated Development Plan* 130. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 147.

<sup>707</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 110.

<sup>708</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 110.

<sup>709</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 110.

<sup>710</sup> See para 2.7 and 2.8.

which mentions the Knysna Estuary.<sup>711</sup> The IDP does not specify if there are currently any EMCAs in place.

#### *4.2.1.2 Alignment with principles, objectives, and duties*

##### 4.2.1.2.1 Basic municipal services challenges

Many factors contributing to the pollution are the Knysna Municipality's responsibility.<sup>712</sup> The Municipality is responsible for stormwater and related infrastructure in the municipal area, for example.<sup>713</sup> These areas contributing to the pollution of the Knysna Estuary indicate the Municipality did not exercise their municipal functions in a way that promotes a safe and healthy environment, thus not fulfilling the objectives to use its administrative capacity to promote a safe and healthy environment and prevent pollution and ecological degradation.<sup>714</sup> Despite the increasing population overburdening the system, it is not an event which happened overnight. The Municipality must have been able to foresee the consequences and take measures to prevent the WWTW discharge from polluting the Knysna Estuary to such an extent. They did not, thus not taking preventative actions to minimise the damage.<sup>715</sup>

The Municipality reportedly finds it challenging to reduce the chemical and organic pollutants entering the Knysna Estuary.<sup>716</sup> Compliance with environmental legislation is also a challenge for the Municipality.<sup>717</sup> Inadequate explanations are provided for these challenges, and the environmental legislation in question was not specified. The only remnant of an explanation of their struggles is the inequalities of historical town planning.<sup>718</sup> Despite the challenges, the Municipality still has the duty to stop, control, and remedy the pollutants entering the Knysna Estuary, which does not

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<sup>711</sup> Knysna Municipality *2023 Integrated Development Plan* 10.

<sup>712</sup> See para 4.2.1.1.1.

<sup>713</sup> See para 2.7.

<sup>714</sup> See para 2.7.

<sup>715</sup> See para 2.7 and 4.2.1.1.1.

<sup>716</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 109.

<sup>717</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 109.

<sup>718</sup> Knysna Municipality *2017-2022 Amended IDP Section 25* 107.

seem to be the case since the pollution is an ongoing issue.<sup>719</sup> Furthermore, reasonable measures should have been put in place to prevent pollution and ecological degradation.<sup>720</sup> The actions of the Municipality are also against the principle of ecological sustainability, which entails that the disturbance of ecosystems and loss of biological diversity should be avoided, or minimised and remedied.<sup>721</sup>

It is unfortunate that the Municipality does not acknowledge the specific environmental legislation with which they are not complying. The Knysna Municipality is not furnishing the community with the opportunity to gain the necessary understanding of the events.<sup>722</sup> Thus, the public lacks essential information, hindering meaningful public participation.<sup>723</sup>

#### 4.2.1.2.2 Climate change and environmental matters

The Climate Change Adaption Plan aims to achieve climate resilience and sustainability.<sup>724</sup> The IDP mentions this priority project in its planning stages but does not provide a timeframe for completion.<sup>725</sup> Nonetheless, this, along with the plan to use wetland restoration, indicates that the Municipality is complying with its duty to adopt or implement plans that attempt to achieve environmentally sustainable outcomes for the Knysna Estuary.<sup>726</sup>

However, increasing the dam capacity in the Knysna River may spell problems for the Knysna Estuary, as the freshwater flow supply is already in a sensitive state, and any other alterations may worsen the situation.<sup>727</sup> While the water scarcity poses a problem for the residents, decreasing the flow of fresh water to the Knysna

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<sup>719</sup> See para 2.8.

<sup>720</sup> See para 2.8.

<sup>721</sup> See para 2.7

<sup>722</sup> See para 3.4.2.

<sup>723</sup> See para 2.7 and 4.2.1.1.1.

<sup>724</sup> Knysna Municipality *2023 Integrated Development Plan* 21. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 111.

<sup>725</sup> Knysna Municipality *2023 Integrated Development Plan* 21. See also Knysna Municipality *2017-2022 Amended IDP Section 25* 111.

<sup>726</sup> See para 2.7 and 4.2.1.1.2.

<sup>727</sup> Claassens *et al* 2020 *African Journal of Aquatic Sciences* 1. See also Hayes *et al* *Knysna Estuary Management Plan: Situation Assessment Report v*; See para 1.1.

Estuary would also create issues.<sup>728</sup> The IDP does not acknowledge the Knysna Estuary in this development decision, thus not fulfilling the duty to consider protected ecosystems in the IDP, and not complying with the principle of the best practicable environmental option.<sup>729</sup> This is also against the principle of ecological sustainability, which entails ensuring that development does not undermine the long-term persistence and resilience of biodiversity and ecosystems.<sup>730</sup>

#### 4.2.1.2.3 Spatial development

The SDF also highlights the concern about the security of the water supply and reports that considerations are being made to increase the water storage capacity in the upper Knysna River.<sup>731</sup> Again, no consideration is given to the Knysna Estuary. Thus, the Municipality is not fulfilling its duty to consider protected ecosystems in the IDP when discussing development decisions, the principle of best practicable environmental option, or ecological sustainability.<sup>732</sup> However, the SDF does mention the prohibition of new developments below the 5-metre contour line. This is a measure that manages the environmental impacts of urban development and directly contributes to the well-being of the Knysna Estuary.<sup>733</sup> Thus, the Municipality is adhering to the duty of utilising municipal planning to benefit the Knysna Estuary and the principle of ecological sustainability.<sup>734</sup>

The Bongani neighbourhood centre is an example of the Municipality fulfilling its duty to remedy pollutants entering the Knysna Estuary.<sup>735</sup> Rehabilitating the wetland and riparian zone will mitigate flooding and contribute to the reduction of pollutants entering the Knysna Estuary.<sup>736</sup> Thus, the Municipality is adhering to the duty of

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<sup>728</sup> See para 1.1. and 4.2.1.1.2.

<sup>729</sup> See para 2.7.

<sup>730</sup> See para 2.7.

<sup>731</sup> Knysna Municipality *Knysna Municipal Spatial Development Framework* 15.

<sup>732</sup> See para 2.8.

<sup>733</sup> See para 1.1, 2.7 and 4.2.1.1.3.

<sup>734</sup> See para 2.7.

<sup>735</sup> See para 2.7 and 4.2.1.1.4.

<sup>736</sup> See para 4.2.1.1.2.

utilising its executive authority to manage local amenities to benefit the Knysna Estuary and the principle of ecological sustainability.

#### 4.2.1.2.4 Strategic objectives

The strategic objectives listed in the IDP indicate compliance with the duty to consider protected ecosystems in the IDP, as it considers the pollution of the Knysna Estuary as a risk.<sup>737</sup>

The water scarcity poses massive problems for both the town and the Knysna Estuary.<sup>738</sup> The water treatment systems in Knysna not achieving Blue Drop certification status is worrying, and is indicative of poor use of administrative authority to manage sanitation infrastructure.<sup>739</sup> No explanation was given as to why the Municipality struggles to achieve an efficient effluent quality indicating a lack of transparency and accountability.<sup>740</sup> Furthermore, the increasing population poses problems.<sup>741</sup> The urban areas have been confirmed to contribute to the pollution in the Knysna Estuary, and expanding the urban areas without the proper capability to provide adequate basic municipal services could cause complications for the Knysna Estuary, therefore not adhering to the ecological sustainability principle.<sup>742</sup>

The IDP fails to acknowledge the delicate balance between providing water security and avoiding further harm to the Knysna Estuary. Ideally, the negative impacts on the Knysna Estuary should be anticipated and prevented to protect the people's environmental rights and the integrity of the ecosystem.<sup>743</sup> Where it cannot be prevented, it should be mitigated and remedied, which is not communicated by the IDP.<sup>744</sup> Furthermore, the precautionary principle should be applied.<sup>745</sup>

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<sup>737</sup> See para 2.7 and 4.2.1.1.4.

<sup>738</sup> See para 4.2.1.1.4.

<sup>739</sup> See para 4.2.1.1.4.

<sup>740</sup> See para 3.2.

<sup>741</sup> See para 4.2.1.1.4.

<sup>742</sup> See para 1.1, 2.7 and 4.2.1.1.4.

<sup>743</sup> See para 2.4.1.

<sup>744</sup> See para 2.4.1.

<sup>745</sup> See para 2.7.

The Climate Change Adaption Strategy and the River Health Project are examples of adopting plans or strategies to remedy pollutants entering the Knysna Estuary.<sup>746</sup> The Municipality's intention to become proactive in mitigating the potential risk of environmental disasters is an example of complying with the preventative principle as well as the duty of care.<sup>747</sup>

#### 4.2.1.2.5 Environmental management plans

According to the available information, the Municipality does not have a Biodiversity Management Plan, nor an active Municipal Coastal Management Programme.<sup>748</sup> It is thus not adhering to the duty to include these plans in the IDP.<sup>749</sup>

#### *4.2.1.3 Application of the IDP for estuarine management*

The Knysna Municipality IDP does mention the Knysna Estuary in some of its decisions, however, when it comes to exercising the municipal functions, the Estuary seems to have drawn the short straw. Too few development decisions adequately consider the ecological health of the Knysna Estuary.<sup>750</sup> Yet, it is worth noting that the Municipality has implemented development plans that would be beneficial to the Knysna Estuary. Furthermore, the Municipality does not have all the necessary environmental management plans in place.<sup>751</sup> More often than not, the IDP does not comply with the principles, objectives, and duties applicable to municipalities for contributing to estuarine management. The most significant issues that need to be resolved are the Municipality's functional areas, namely the WWTW and stormwater systems, and the lack of basic municipal services. The Municipality acknowledges that failing infrastructure such as the WWTW is a significant factor in the decreasing quality of the Knysna Estuary, and they are struggling to remediate this. The population increase is an exponential contributor to the Knysna Estuary's issues,

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<sup>746</sup> See para 2.7 and 4.2.1.1.4.

<sup>747</sup> See para 2.7 and 4.2.1.1.4.

<sup>748</sup> Knysna Municipality *2023 Integrated Development Plan* 173.

<sup>749</sup> See para 2.7 and 4.2.1.1.5.

<sup>750</sup> See para 4.2.1.2.2 and 4.2.1.2.3.

<sup>751</sup> See para 4.2.1.2.5.

and the Municipality's inability to provide efficient basic municipal services aggravates the situation.

A municipality does not fulfil its statutory obligations to promote a safe and healthy environment, when it does not provide basic municipal services adequately, and when those services are not provided in an environmentally sustainable way.<sup>752</sup>

In a nutshell, the IDP does adhere to some of the principles, objectives and duties of municipalities that could enable the Municipality to contribute to the management of the Estuary. However, the Knysna Estuary is an exceptional environmental asset and deserves exceptional consideration, yet the Municipality does not seem to share this sentiment.<sup>753</sup> Ideally, the Municipality should strive to adopt innovative approaches to contribute to managing the Estuary and exceed the expectations placed on it.<sup>754</sup> The Knysna Municipality's IDP could benefit from better alignment with the principles, objectives, and duties, especially from the perspective of basic municipal services and stormwater and sewerage infrastructure, to contribute to the management of the Knysna Estuary.

#### *4.2.2 Municipal budget*

##### *4.2.2.1 Exposition*

The Municipality's budget is guided by the strategic objectives found in the IDP, including promoting a safe and healthy environment through the protection of its natural resources.<sup>755</sup> According to Knysna's IDP, the need for a management plan to prevent the degradation of the Knysna Estuary was identified and the Planning and Economic Development directorate is the responsible directorate to realise this.<sup>756</sup> This directorate was responsible for upgrading two of their wastewater treatment works which has increased the treatment capacity by 2.5 megalitres, for

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<sup>752</sup> See para 2.3.1.

<sup>753</sup> See para 1.1 and para 4.2.1.1.

<sup>754</sup> See para 2.2.3.2.

<sup>755</sup> Knysna Municipality *Final 2023/2024 MTREF Budget Report* 23.

<sup>756</sup> Knysna Municipality *2023 Integrated Development Plan* 188.

a total capacity of 10.5 megalitres of wastewater.<sup>757</sup> This was done for the sake of the higher demand and to safeguard against potential health and environmental hazards.<sup>758</sup>

The Municipality also confirms in its budget that they are considering constructing an additional storage dam at Kruisvallei.<sup>759</sup> Even though this process is time-consuming and requires many procedures to be followed, the construction of the storage dam is a high probability.<sup>760</sup>

The municipal budget declares amounts budgeted for the WWTW under the capital expenditure for renewal of assets, repairs and maintenance, and upgrading.<sup>761</sup> The budget furthermore makes provision for environmental protection under the guise of biodiversity and landscapes, nature conservation and pollution control.<sup>762</sup> It is, however, unclear what the funds are supposed to be used for, or whether this holds any relevance for the Knysna Estuary.

#### 4.2.2.1.1 The Auditor-General of South Africa's Report

The Auditor-General of South Africa (AGSA) reports are consulted for better insight into the budgetary activities of the Municipality. The most recent Audit Report available on the AGSA's website is for the 2021 to 2022 period. Knysna's audit outcomes have for the past six years remained unchanged and hold the status of unqualified with findings.<sup>763</sup> The Municipality reported a deficit amount of R17.6 million.<sup>764</sup>

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<sup>757</sup> Knysna Municipality *Final 2023/2024 MTREF Budget Report 2*.

<sup>758</sup> Knysna Municipality *Final 2023/2024 MTREF Budget Report 2*.

<sup>759</sup> Knysna Municipality *Final 2023/2024 MTREF Budget Report 3*.

<sup>760</sup> Knysna Municipality *Final 2023/2024 MTREF Budget Report 3*.

<sup>761</sup> Knysna *Annexure B Main Budget and Supporting Tables 90*.

<sup>762</sup> Knysna *Annexure B Main Budget and Supporting Tables 40*.

<sup>763</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>. An unqualified audit opinion means that there were no material misstatements in the financial statements, but that findings have been raised on reporting on predetermined objectives, non-compliance with legislation, or both.

<sup>764</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

The audit opinion for Knysna in the 2021/2022 period included findings on compliance with requirements of specific legislation.<sup>765</sup> In terms of consequence management, there was no investigation into unauthorised, irregular, or fruitless and wasteful expenditure as section 32 of the *MFMA* requires.<sup>766</sup> The findings also declared that the Municipality did not take reasonable steps to prevent irregular expenditure as section 62 of the *MFMA* requires.<sup>767</sup> Furthermore, the Municipality has not implemented suitable systems to monitor, measure and evaluate the performance of their staff as required by section 67 of the *Municipal Systems Act*.<sup>768</sup>

The Municipality has indicated an overall vacancy rate of 10 per cent, and its senior management has experienced a 71 per cent vacancy rate.<sup>769</sup> This has led to the municipal council experiencing instability during the year.<sup>770</sup> The audit opinion emphasised that the Municipality must fill their key vacancies with competent staff and that their financial department be given the appropriate training and skills to be able to complete their own financial statements for audit purposes.<sup>771</sup> The same could be said for staff in other departments of the Municipality as well, such as directorates in committees which influence the Knysna Estuary.

On the topic of infrastructure maintenance, repairs and maintenance expenditure amounted to R51.6 million.<sup>772</sup> The audit opinion found that expenditure for repairs and maintenance only amounted to 4.9 per cent of the Municipality's total infrastructure assets.<sup>773</sup> This percentage seems extremely low when they have a WWTW, which could benefit from a large amount of maintenance and repairs, polluting the Knysna Estuary.

The Municipality's inter-financial control was found to be concerning, and the root causes for this were reported to be slow response by management, instability,

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<sup>765</sup> Knysna *Annual Report 2021/2022* 215.

<sup>766</sup> Knysna *Annual Report 2021/2022* 215.

<sup>767</sup> Knysna *Annual Report 2021/2022* 215.

<sup>768</sup> Knysna *Annual Report 2021/2022* 215.

<sup>769</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>770</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>771</sup> Knysna *Annual Report 2021/2022* 217.

<sup>772</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>773</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>

vacancies, as well as inadequate consequences.<sup>774</sup> The Audit report warned heavily against the Municipality's lack of adequate internal controls in the Management Report.<sup>775</sup> The Municipality was warned that the organisation cannot run effectively and efficiently without steadfast internal controls.<sup>776</sup>

Moreover, findings regarding the Municipality's supply chain management included uncompetitive and unfair procurement procedures.<sup>777</sup> Areas of concern noted in the audit were awarding contracts to other state officials as well as inadequate contract management.<sup>778</sup>

The audit opinion's findings led to conclusions and recommendations including optimising income for improved service delivery and maintaining vital infrastructure.<sup>779</sup> There is also a call for improved controls in all Directorates, as well as creating and implementing a performance management system.<sup>780</sup> Furthermore, implementing best-practice ethics, anti-fraud and corruption policies and procedures was recommended.<sup>781</sup> The need to take action on deviations and other questionable supply chain practices while facilitating consequence management and improving communication and public participation for its residents was also voiced.<sup>782</sup>

#### *4.2.2.2 Alignment with principles, objectives, and duties*

The Knysna Municipality has drafted a municipal budget with environmental outcomes by providing for environmental protection, such as biodiversity and landscapes, nature conservation, and pollution control.<sup>783</sup> However, it is unclear whether these budgeted items are in any way related to the Knysna Estuary.

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<sup>774</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>775</sup> Knysna *Annual Report 2021/2022* 217.

<sup>776</sup> Knysna *Annual Report 2021/2022* 217.

<sup>777</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>778</sup> Auditor-General South Africa 2023 <https://tinyurl.com/hczmnv78>.

<sup>779</sup> Knysna *Annual Report 2021/2022* 218.

<sup>780</sup> Knysna *Annual Report 2021/2022* 218.

<sup>781</sup> Knysna *Annual Report 2021/2022* 218.

<sup>782</sup> Knysna *Annual Report 2021/2022* 219.

<sup>783</sup> See para 4.2.2.1.

The AGSA report paints a bleak picture of the overall fiscal activities of the Municipality.<sup>784</sup> The Municipality has faltered in taking reasonable measures to prevent pollution and ecological degradation, and the lack of maintenance and repair to the infrastructure indicates not adhering to the preventative principle and not fulfilling its duty of care.<sup>785</sup> The pollution from the WWTW is an ongoing issue, and no certain solution has been reached. Therefore, the pollution has not been remedied.<sup>786</sup> Overall, the budget does not fulfil the objective of preventing pollution and ecological degradation, because the budget is remedial in nature, and does not show any positive changes thus far.<sup>787</sup> The budget for the promotion of the Knysna Estuary's ecological health is underutilised.

#### *4.2.2.3 Application of the municipal budget for estuarine management*

The municipal budget can only contribute to the desired environmental outcomes by allocating resources to the targets identified in the IDP.<sup>788</sup> However, The IDP requires improvement in the form of more advanced environmental objectives to contribute to the management of the Knysna Estuary.<sup>789</sup> The environmental considerations the budget does account for are not conclusively related to the Knysna Estuary.<sup>790</sup> The upgrades and maintenance of the functional areas of the Municipality which contribute to the pollution of the Knysna Estuary are accounted for in the budget, yet the AGSA report on the amount spent on maintenance of these infrastructures is objectively low given the severity of the situation.<sup>791</sup> The municipal budget could contribute more to the management of the Knysna Estuary by allocating more to the maintenance and upgrade of the infrastructure which causes the pollution in the Knysna Estuary.

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<sup>784</sup> See para 4.2.2.1.1.

<sup>785</sup> See para 2.7.

<sup>786</sup> See para 2.7.

<sup>787</sup> See para 2.7.

<sup>788</sup> See para 3.3.2.

<sup>789</sup> See para 4.2.1.3.

<sup>790</sup> See para 4.2.2.1.

<sup>791</sup> See para 4.2.2.1.1.

### 4.2.3 Service Delivery and Budget Implementation Plan

#### 4.2.3.1 Exposition

Knysna's SDBIP reflects a strategic objective to promote a safe and healthy environment through protecting their natural resources.<sup>792</sup> This objective falls under the Municipality's Strategic Focus Area of Basic Service Delivery.<sup>793</sup> Priorities under this Strategic Objective include environmental conservation and disaster management.<sup>794</sup> However, this strategic objective has a zero count and as such it is not included in the Top Level SDBIP/Institutional Scorecard Performance Indicators.<sup>795</sup> Therefore, there is no way to report on the key performance indicators that the Municipality must establish for the feasibility of reaching these objectives. Despite the strategic objective having a zero count, a budget has been allocated to it.<sup>796</sup>

Another strategic objective the Municipality has placed under Basic Service Delivery is to improve and maintain current basic service delivery through specific infrastructural development projects.<sup>797</sup> Priorities under this Strategic Objective include stormwater management, water supply, and integrated human settlements.<sup>798</sup> In terms of water management, the Municipality has set itself the key performance indicator (KPI) of 90 per cent compliance with general wastewater outflow standards.<sup>799</sup>

Yet, the ammonia concentrations in the discharge from the WWTW have not complied with the standards 80 per cent of the time since 2013.<sup>800</sup> The Municipality

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<sup>792</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>793</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>794</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>795</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>796</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 7.

<sup>797</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>798</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 28.

<sup>799</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 52.

<sup>800</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements* Age 13.

has not set a KPI for the overall functioning of the WWTW and does not mention the failing infrastructure causing the pollution in the Knysna Estuary.<sup>801</sup>

#### *4.2.3.2 Alignment with principles, objectives, and duties*

Despite the SDBIP having a strategic objective to promote a safe and healthy environment, the Knysna Estuary is ridden with pollution caused by the WWTW.<sup>802</sup> A lack of a KPI for the overall functioning of the WWTW shows that the Municipality is not fulfilling its obligation to use its administrative capacity to promote a safe and healthy environment.<sup>803</sup> Furthermore, the fact that the situation was allowed to reach this level shows that the Municipality has not taken preventative actions to minimise the environmental damage, since its WWTW is largely responsible for the damage to the Knysna Estuary.<sup>804</sup> It is therefore not complying with the preventative principle or the ecological sustainability principle.

The findings in the SDBIP substantiate other claims that the Municipality is showing a lack of accountability for the WWTW pollution, and they are not being transparent in the SDBIP on this matter.<sup>805</sup> Thus, they are not adhering to the principle of effective, transparent and accountable government.<sup>806</sup>

#### *4.2.3.3 Application of the SDBIP for estuarine management*

The SDBIP cannot contribute to estuarine management unless the objectives are set out in the IDP.<sup>807</sup> As already argued, the IDP needs improvement in terms of more advanced environmental objectives.<sup>808</sup> Therefore, once the change is implemented in the IDP, the SDBIP still has great potential to allow the Municipality to contribute to the management of the Knysna Estuary.

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<sup>801</sup> Knysna Municipality *2023/2024 Service Delivery and Budget Implementation Plan (SDBIP)* 53.

<sup>802</sup> See para 1.1.

<sup>803</sup> See para 2.7.

<sup>804</sup> See para 2.7.

<sup>805</sup> See para 1.1.

<sup>806</sup> See para 2.7.

<sup>807</sup> See para 3.3.2.

<sup>808</sup> See para 4.2.1.3.

#### 4.2.4 By-laws

The Knysna Municipality may make and administer by-laws.<sup>809</sup> There are no by-laws which directly regulate matters concerning the Knysna Estuary. However, there are by-laws which regulate the Municipality's functional areas and may be interpreted to include the Knysna Estuary.

##### 4.2.4.1 Exposition

###### 4.2.4.1.1 The Spatial Planning and Land Use Management By-law

The available by-laws regulate external matters influencing the Knysna Estuary's ecological health. For example, the *Knysna Municipality Spatial Planning and Land Use Management By-law* of 2021 (*Spatial Planning and Land Use Management By-law*).<sup>810</sup> The by-law regulates the adoption of a municipal SDF for a geographical area, and the purpose thereof is to contain details of priorities about land use planning as they relate to biodiversity and environmental issues.<sup>811</sup>

The by-law provides that the Municipality may appoint project committee members to aid in the administrative duties of the spatial development framework.<sup>812</sup> Here it is mandated that project committee members must consist of municipal council members from the environmental management department where relevant.<sup>813</sup> The Municipality also provides for the consideration of environmental impacts by including multiple sections in the by-law allowing for comments to be considered outside the due date if they would significantly impact the environment otherwise.<sup>814</sup>

###### 4.2.4.1.2 The Public Amenities By-law

The *Knysna Municipality Public Amenities By-law* of 2014 (*Public Amenities By-law*) may be interpreted to be relevant to the Knysna Estuary, as the Estuary falls into

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<sup>809</sup> See para 3.4.1.

<sup>810</sup> <https://tinyurl.com/4465bz7a>.

<sup>811</sup> Section 9(2)(e) of the *Spatial Planning & Land Use Management By-law*.

<sup>812</sup> Section 4(1) of the *Spatial Planning & Land Use Management By-law*.

<sup>813</sup> Section 4(2)(b)(iv) of the *Spatial Planning & Land Use Management By-law*. There are no prescriptions for what qualifications an environmental management employee must have.

<sup>814</sup> Sections 50(5)(d) and 80(10)(e) of the *Spatial Planning & Land Use Management By-law*.

the definition of a bathing area.<sup>815</sup> A bathing area in terms of the Act includes any beach and portion of the sea for 200 metres within the Municipality's area of jurisdiction, while a beach is also defined as an area which adjoins the high-water mark.<sup>816</sup> Furthermore, the Knysna Estuary fits into the description of a public amenity, which is defined as any open space, swimming area, recreation site, nature reserve or river which is lawfully managed in terms of an agreement by the Municipality and another person.<sup>817</sup> The public amenity is open to the public at a municipality's discretion.<sup>818</sup>

The Municipality has the authority to permanently or temporarily close the public amenity or a portion thereof if public health or safety concerns arise.<sup>819</sup> This by-law prohibits persons from interfering with, obstructing, or altering the flow of water or draining a wetland.<sup>820</sup> Furthermore, persons are prohibited from polluting, misusing, or contaminating any water source, water supply, dam, or river with any harmful contaminants.<sup>821</sup> Persons guilty of these actions commit an offence in terms of the by-law.<sup>822</sup> Rivers flow into the Knysna Estuary, and streams and stormwater often lead into it. The Knysna Estuary itself is a water source, therefore this by-law applies to pollution of the Estuary as well, as it gives the Municipality the authority to prevent its pollution. The by-law provides the Municipality with the authority to appoint and authorise officials with the powers, duties and functions to enforce the by-law.<sup>823</sup> Persons committing offences in terms of this by-law are liable for penalties such as fines or imprisonment.<sup>824</sup>

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<sup>815</sup> Section 1 of the *Public Amenities By-law*.

<sup>816</sup> Section 1 of the *Public Amenities By-law*.

<sup>817</sup> Section 1 of the *Public Amenities By-law*.

<sup>818</sup> Section 3(1) of the *Public Amenities By-law*.

<sup>819</sup> Section 3(3) of the *Public Amenities By-law*.

<sup>820</sup> Section 10(1)(c)(vii) of the *Public Amenities By-law*.

<sup>821</sup> Section 10(1)(c)(xii) of the *Public Amenities By-law*.

<sup>822</sup> Section 10(2) of the *Knysna Amenities By-law*.

<sup>823</sup> Sections 14 and 15 of the *Public Amenities By-law*.

<sup>824</sup> Section 17 of the *Public Amenities By-law*.

#### 4.2.4.1.3 The Recreational Use of Beaches By-law

In the *Knysna Municipality Recreational Use of Beaches By-law* of 2017 (*Recreational Use of Beaches By-law*), a section is committed to environmental conservation on beaches.<sup>825</sup> This by-law prohibits polluting a dune, coastal wetland, salt marsh, beach area, or area surrounding these areas with hazardous materials.<sup>826</sup> Salt marshes and wetlands are vital components of the Estuary's function.<sup>827</sup> The by-law awards powers to municipal employees to search, seize, or dispose of anything that contravenes the provisions in the by-law.<sup>828</sup> Any person contravening a provision in this by-law is liable on conviction to a fine or imprisonment.<sup>829</sup>

#### 4.2.4.1.4 The Integrated Waste Management By-law

The *Knysna Municipality Integrated Waste Management By-law* of 2014 (*Integrated Waste Management By-law*) places the obligation on the person creating waste to manage it in such a way that it does not endanger the environment.<sup>830</sup> The by-law also prohibits persons from disposing of waste in a way that would cause pollution, have an impact on the environment, or be harmful to the health of others.<sup>831</sup>

#### 4.2.4.1.5 The Water and Sanitation By-law

The *Knysna Municipality Water and Sanitation By-law* of 2015 (*Water and Sanitation By-law*) considers an estuary as public water.<sup>832</sup> The by-law gives the Municipality the authority to approve industrial effluent discharge into the sanitation system.<sup>833</sup> Persons are not permitted to discharge industrial effluent into the Municipality's sanitation system unless they have received approval to do so.<sup>834</sup> This provision depends on whether the Municipality's sanitation system is sufficient to treat the

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<sup>825</sup> Section 7 of the *Recreational Use of Beaches By-law*.

<sup>826</sup> Section 7(6) of the *Recreational Use of Beaches By-law*.

<sup>827</sup> See para 1.1.

<sup>828</sup> Section 25 of the *Recreational Use of Beaches By-law*.

<sup>829</sup> Section 27 of the *Recreational Use of Beaches By-law*.

<sup>830</sup> Section 4(1)(e) of the *Integrated Waste Management By-law*.

<sup>831</sup> Section 14(a) of the *Integrated Waste Management By-law*.

<sup>832</sup> Section 1 of the *Water and Sanitation Services By-law*.

<sup>833</sup> Section 75(1) of the *Water and Sanitation Services By-law*.

<sup>834</sup> Section 75(1) of the *Water and Sanitation Services By-law*.

effluent to the legal discharge standard.<sup>835</sup> The by-law also provides that only the Municipality is responsible for the management, operation and maintenance of water services infrastructure unless there is a written agreement between the Municipality and the other party.<sup>836</sup> The WWTW is under the management of the Knysna Municipality, so there are no secondary parties that are responsible for its management.<sup>837</sup> The discharge from the WWTW is non-compliant with the standards, which may be due to Knysna Municipality's governance, financial, or infrastructure inadequacies.<sup>838</sup>

The by-law prohibits a property producing sewage from not being connected to the Municipality's sanitation system, unless on-site sanitation services have been approved.<sup>839</sup> Furthermore, the by-law provides that in the event on-site sanitation services are used which are not connected to the Municipality's sanitation system, it must be done with the approval of an engineer.<sup>840</sup> The onus falls on the person to provide the engineer with proof that the use of such services would not have a negative impact on the environment.<sup>841</sup> However, the engineer is also permitted to conduct their own investigation to determine if it does impact the environment negatively.<sup>842</sup>

#### 4.2.4.1.6 The Zoning Scheme By-law

The *Knysna Municipality Zoning Scheme By-law* of 2020 (*Zoning Scheme By-law*) regulates the type of development permitted in different use zones and includes any developments in conservation areas.<sup>843</sup> The Municipality must be furnished with the bio-physical characteristics of the property as well as the provision of water, stormwater management, and the disposal of sewage and waste in the development

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<sup>835</sup> Section 75(2) of the *Water and Sanitation Services By-law*.

<sup>836</sup> Section 96(1) *Water and Sanitation Services By-law*. Water services in terms of this by-law means water supply and water sanitation.

<sup>837</sup> See para 1.1.

<sup>838</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 13*.

<sup>839</sup> Section 48 of the *Water and Sanitation Services By-law*.

<sup>840</sup> Section 104(1) of the *Water and Sanitation Services By-law*. The Engineer is the Director of Technical Services of the Municipality.

<sup>841</sup> Section 104(2) of the *Water and Sanitation Services By-law*.

<sup>842</sup> Section 104(4) of the *Water and Sanitation Services By-law*.

<sup>843</sup> Section 23(1)(d) of the *Zoning Scheme By-law*.

plan.<sup>844</sup> If a municipality considers it necessary, a site development plan must also be accompanied by a stormwater impact assessment.<sup>845</sup> The Knysna Estuary is zoned as below the high water mark, which means it is below the current point of maximum rise of water. This by-law is from 2020 and does not reflect the Municipality's resolve to prohibit further developments in the 5-metre contour line as represented by the IDP.<sup>846</sup> However, the by-law does prohibit the erection of additional dwelling units within 1 kilometre of the high-water mark, unless a situated township is between the unit and the sea or tidal river.<sup>847</sup>

#### *4.2.4.2 Alignment with principles, objectives, and duties*

The Municipality may create by-laws for the functional areas influencing the Knysna Estuary.<sup>848</sup> The Municipality has complied with this duty.<sup>849</sup> The Municipality also noted its intention to develop a Coastal Management by-law to be tabled for the Council by the end of June 2023.<sup>850</sup> However, the finalised by-law was not available during this study.

##### *4.2.4.2.1 Spatial Planning and Land Use Management By-Law*

This by-law fulfils the Municipality's duty to manage municipal planning, a functional area closely related to an estuary.<sup>851</sup> The by-law requires that the SDF must contain priorities of land use planning as they relate to biodiversity and environmental issues.<sup>852</sup> Thus, this provision can be interpreted to potentially prevent ecological degradation and promote ecological sustainability.<sup>853</sup> Furthermore, by allowing comments of environmental importance to be considered outside the prescribed due

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<sup>844</sup> Sections 23(2)(a) and (l) of the *Zoning Scheme By-law*.

<sup>845</sup> Section 23(7)(c) of the *Zoning Scheme By-law*.

<sup>846</sup> See para 4.2.1.5.

<sup>847</sup> Schedule 2 of the *Zoning Scheme By-law*. An additional dwelling unit is a unit that may be erected on an agricultural land unit with the consent of the Municipality, in addition to a primary dwelling house or agricultural worker accommodation for bona fide agricultural workers, or both.

<sup>848</sup> See para 2.7.

<sup>849</sup> See para 2.7.

<sup>850</sup> Knysna Municipality *2023 Integrated Development Plan 77*.

<sup>851</sup> See para 2.7.

<sup>852</sup> See para 4.2.4.1.1.

<sup>853</sup> See para 2.7.

date, the interests of persons with an interest in the environment are promoted, thus fulfilling the principle of participation.<sup>854</sup>

#### 4.2.4.2.2 Public Amenities By-Law

This by-law fulfils the Municipality's duty to manage local amenities, a functional area closely related to an estuary.<sup>855</sup> The inclusion of a provision prohibiting the pollution of a water resource with harmful contaminants is an example of the Municipality carrying out its responsibilities in terms of coastal access land.<sup>856</sup> Furthermore, this by-law prescribes preventative actions to minimise damages, as well as take reasonable measures to prevent pollution.<sup>857</sup> Overall, this provision in the by-law fulfils the Municipality's objective to prevent pollution and ecological degradation.<sup>858</sup>

#### 4.2.4.2.3 Recreational Use of Beaches By-Law

This by-law fulfils the Municipality's duty to manage beaches and amusement facilities, a functional area closely related to an estuary.<sup>859</sup> Furthermore, this by-law has provisions regulating activities on beaches, a component of the Knysna Estuary, and thus a protected area in its jurisdiction.<sup>860</sup> This by-law specifically prohibits the pollution of a salt marsh, a vital component of the Knysna Estuary. Thus, the Municipality is fulfilling its obligation to prevent pollution and ecological degradation.<sup>861</sup>

#### 4.2.4.2.4 Integrated Waste Management By-Law

This by-law fulfils the Municipality's duty to manage basic municipal services, a functional area closely related to an estuary.<sup>862</sup> The provisions in this by-law promote

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<sup>854</sup> See para 2.7.  
<sup>855</sup> See para 2.7.  
<sup>856</sup> See para 2.7.  
<sup>857</sup> See para 2.7.  
<sup>858</sup> See para 2.7.  
<sup>859</sup> See para 2.7.  
<sup>860</sup> See para 2.7.  
<sup>861</sup> See para 2.7.  
<sup>862</sup> See para 2.7.

a safe and healthy environment and provide for the prevention of pollution and ecological degradation.<sup>863</sup>

#### 4.2.4.2.5 Water and Sanitation By-Law

This by-law fulfils the Municipality's duty to basic municipal services, a functional area closely related to an estuary.<sup>864</sup> The by-law regulates the permitted discharge leading into the sanitation system and permits an engineer to investigate if sanitation systems harm the environment, therefore potentially promoting a safe and healthy environment.<sup>865</sup> This by-law confirms water services infrastructures are the responsibility of the Municipality, and that the Municipality is not complying with its duty to exercise its executive and legislative in a way that promotes a safe and healthy environment.<sup>866</sup>

#### 4.2.4.2.6 Zoning Scheme By-Law

This by-law fulfils the Municipality's duty to manage municipal planning, a functional area closely related to an estuary.<sup>867</sup> The decision in the IDP to prohibit further developments in the 5-metre contour line is not reflected here.<sup>868</sup> This would have been a prime example of the Municipality using the by-law's potential to manage the environmental impacts of urban development.<sup>869</sup>

#### *4.2.4.3 Application of the by-laws for estuarine management*

The by-laws of Knysna Municipality do include provisions contributing to estuarine management. The most prominent provision is the prohibition of pollution. The *Public Amenities By-Law*, the *Recreational Use of Beaches By-Law*, and the *Integrated Waste Management By-law* are examples of by-laws prohibiting pollution of the Estuary.<sup>870</sup> This is the strongest indication of the by-laws contributing to the

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<sup>863</sup> See para 2.7.

<sup>864</sup> See para 2.7.

<sup>865</sup> See para 4.2.4.1.5.

<sup>866</sup> See para 4.2.4.1.5. See also para 2.7.

<sup>867</sup> See para 2.7.

<sup>868</sup> See para 4.2.4.1.6.

<sup>869</sup> See para 2.7.

<sup>870</sup> See para 4.2.4.1.2, 4.2.4.1.3 and 4.2.4.1.4.

management of the Knysna Estuary. The *Zoning-Scheme By-Law*, however, needs to be updated to reflect the decision to prohibit further developments in the 5-metre contour line.<sup>871</sup> Notably, the by-laws do not have provisions holding the Municipality accountable for pollution. The persons in charge of enforcing the by-laws are mostly employees of the Municipality. Therefore, there is no incentive for them to take action against the Municipality for non-compliance.

#### *4.2.5 Public participation*

##### *4.2.5.1 Exposition*

Knysna's 2023 IDP contains the list of community priorities. The list contains the issues that the community raised, with the corresponding development objective and the strategic focus area corresponding with the raised issue.<sup>872</sup>

Infrastructure development is a strategic focus area of the Municipality and has a development objective of sewerage and stormwater, among other things.<sup>873</sup> An issue the community raised is investigating the sewage spills into the Knysna Estuary and implementing remedial solutions.<sup>874</sup> The Municipality has listed this issue in the IDP under the sewerage development objective for the strategic focus area infrastructure development.<sup>875</sup> The community also raised the issue of the need for effective stormwater management to prevent the pollution of the Knysna Estuary.<sup>876</sup> This issue falls under the stormwater development objective for infrastructure development.<sup>877</sup> Both these issues fall under the strategic focus area of infrastructure development and the relevant directorate responsible for realising these objectives is the Infrastructure Services.<sup>878</sup> Knysna Municipality states that it is committed to upgrading and expanding the stormwater network infrastructure by

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<sup>871</sup> See para 4.2.4.2.6.

<sup>872</sup> Knysna Municipality *2023 Integrated Development Plan* 191.

<sup>873</sup> Knysna Municipality *2023 Integrated Development Plan* 238.

<sup>874</sup> Knysna Municipality *2023 Integrated Development Plan* 238.

<sup>875</sup> Knysna Municipality *2023 Integrated Development Plan* 238 and 250.

<sup>876</sup> Knysna Municipality *2023 Integrated Development Plan* 250.

<sup>877</sup> Knysna Municipality *2023 Integrated Development Plan* 250.

<sup>878</sup> Knysna Municipality *2023 Integrated Development Plan* 250.

developing and implementing maintenance plans.<sup>879</sup> This seems to be an ongoing activity.<sup>880</sup>

Environmental management is another strategic focus area of the Municipality and it has the development objective of air quality management.<sup>881</sup> The community raised an issue which falls under this category, namely to implement an effective management plan to prevent pollution.<sup>882</sup> This issue was also listed as the fourth priority of Ward 9.<sup>883</sup> The relevant directorate for this focus area is Planning and Economic Development.<sup>884</sup> Preventing pollution is a legally mandated principle which the Municipality must adhere to.<sup>885</sup>

According to Knysna's IDP, the Municipality has implemented a programme for improved citizen participation.<sup>886</sup> This includes creating stakeholder engagement forums, community-based planning, and ward committees.<sup>887</sup> Ward committees are a mechanism for enhancing public participation and providing the members of the community with input on developmental goals within the wards.<sup>888</sup>

The IDP provides comprehensive lists of issues within the wards that community members have raised.<sup>889</sup> This was largely discussed earlier in this chapter, and it was evident that the public participation system has improved.<sup>890</sup> The community in Ward 5 raised the issue of implementing an effective management plan to prevent the pollution of the Knysna Estuary.<sup>891</sup> The community in Ward 9 raised the issue of investigating the causes of sewage spills into the Knysna Estuary as well as

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<sup>879</sup> Knysna Municipality *2023 Integrated Development Plan* 143.

<sup>880</sup> Knysna Municipality *2023 Integrated Development Plan* 143.

<sup>881</sup> Knysna Municipality *2023 Integrated Development Plan* 242.

<sup>882</sup> Knysna Municipality *2023 Integrated Development Plan* 243.

<sup>883</sup> Knysna Municipality *2023 Integrated Development Plan* 188.

<sup>884</sup> Knysna Municipality *2023 Integrated Development Plan* 243.

<sup>885</sup> See para 2.8.

<sup>886</sup> Knysna Municipality *2023 Integrated Development Plan* 31. Unfortunately, there are no specifics on the implementation or adoption of this programme and could be anywhere between the 2017 and 2023 period.

<sup>887</sup> Knysna Municipality *2023 Integrated Development Plan* 31.

<sup>888</sup> Knysna Municipality *2023 Integrated Development Plan* 32.

<sup>889</sup> Knysna Municipality *Annexure B Long Lists of Community Priorities* 1-65.

<sup>890</sup> See para 4.2.1.

<sup>891</sup> Knysna Municipality *Annexure B Long Lists of Community Priorities* 23.

implementing remedial solutions.<sup>892</sup> Ward 9 considers this among its top 5 priorities to implement an effective management plan to prevent the degradation of the Knysna Estuary.<sup>893</sup> Ward 10 raised the issue of effective stormwater management to prevent the pollution of the Knysna Estuary.<sup>894</sup>

#### *4.2.5.2 Alignment with principles, objectives, and duties*

The community has been given the channel to voice their concerns regarding the environment.<sup>895</sup> Thus, the Municipality is promoting participation for persons with an interest in the environment.<sup>896</sup> While the community members have undoubtedly voiced their concerns, the question of whether the Knysna Municipality has or will address these concerns is not known. The community calls for a management plan to prevent the pollution of the Knysna Estuary, and yet, the pollution is not being managed and they are dwindling in implementing remedial measures, which is not in line with the duty of care.<sup>897</sup>

#### *4.2.5.3 Application of public participation for estuarine management*

The Municipality is responsible for creating the appropriate channels to facilitate public participation. They have fulfilled this responsibility.<sup>898</sup> The responsibility then falls on the public to contribute to estuarine management by voicing their concerns, which they have also done.<sup>899</sup> However, implementation of these plans still lies with the Municipality, which means participation from the public will not contribute meaningfully to the management of the Estuary if the changes are not acted upon.

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<sup>892</sup> Knysna Municipality *Annexure B Long Lists of Community Priorities* 47.

<sup>893</sup> Knysna Municipality *Annexure A Top 5 Ward Priorities* 10.

<sup>894</sup> Knysna Municipality *Annexure B Long Lists of Community Priorities* 59.

<sup>895</sup> See para 4.2.5.1.

<sup>896</sup> See para 2.7.

<sup>897</sup> See para 2.7.

<sup>898</sup> See para 4.2.5.1

<sup>899</sup> See para 4.2.5.1.

## 4.2.6 Section 79 and 80 committees

### 4.2.6.1 Exposition

Knysna's executive mayor has appointed a mayoral committee in terms of section 60 of the *Municipal Structures Act* to assist the executive mayor.<sup>900</sup> The members of this mayoral committee are also the chairpersons of the portfolio committees.<sup>901</sup> Knysna Municipality has portfolio committees that exist to provide the people of Knysna with more efficient and effective service delivery.<sup>902</sup> Among these committees is the Planning, Economic Development and Tourism Committee, whose areas of oversight include Land Use Management, Building Control, Environmental Management, Economic Development and Tourism services.<sup>903</sup> The Community Services Committee is responsible for Disaster Management and Waste Management among other things.<sup>904</sup> The Infrastructure Services Committee sees to all infrastructure-related, fleet, and mechanical services.<sup>905</sup> Because the chairpersons of these committees form the mayoral committee, they fall into the classification of section 80 committees.<sup>906</sup> While there is no documentation on the inauguration of these committees and the extent of their duties, committee meeting agendas for 2016 to 2023 are available on the website.<sup>907</sup>

Along with the section 80 committees mentioned above, there is also mention of a Knysna Estuary Pollution Committee, which is separate from the rest. According to the IDP, the Knysna Estuary Pollution Committee was formed in 2009, however, the first mention of the Knysna Estuary Pollution Committee in the Portfolio Meeting Agendas was in April 2019. There is no information available on the formation of the Knysna Estuary Pollution Committee, and the details of the extent of their duties and objectives are unclear. Therefore, it is difficult to identify if it is a section 79 or

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<sup>900</sup> Knysna Municipality date unknown <https://tinyurl.com/2s3j3ft2>.

<sup>901</sup> Knysna Municipality date unknown <https://tinyurl.com/2s3j3ft2>.

<sup>902</sup> Knysna Municipality date unknown <https://tinyurl.com/4f53skes>.

<sup>903</sup> Knysna Municipality date unknown <https://tinyurl.com/4f53skes>.

<sup>904</sup> Knysna Municipality date unknown <https://tinyurl.com/4f53skes>.

<sup>905</sup> Knysna Municipality date unknown <https://tinyurl.com/4f53skes>.

<sup>906</sup> See para 3.4.3

<sup>907</sup> <https://tinyurl.com/4f53skes>. At the time of writing, only 2023 meeting agendas were available and considered for this study.

80 committee. However, its relevancy to the Knysna Estuary makes it worth mentioning. What follows is a brief timeline of the activities these committees acknowledge in their agendas to provide insight into the extent of their involvement with the Knysna Estuary.

Since 2009 the water quality from the Bongani River and the Ashmead Channel has continuously shown high levels of e-coli exceeding the levels safe for recreational use.<sup>908</sup> The main sources of pollution in the Ashmead Channel are the sewage works not meeting special standards as per the discharge license, not capturing pollutants in the Bongani River, not capturing waste through stormwater, runoff and illegal dumping, improper plumbing from informal settlements, and inadequate infrastructure.<sup>909</sup> Improving the final effluent from the WWTW is the responsibility of the Technical Services Department.<sup>910</sup> Since 2013, the WWTW has shown 80 per cent non-compliance with regard to ammonia concentrations.<sup>911</sup> The Knysna Municipality made concerted efforts in 2012/2013 to curb the pollution in the Knysna Estuary.<sup>912</sup> These efforts include council meetings, specialist consultant reports, and action plans. These have not led to any improvement in the state of the Knysna Estuary.<sup>913</sup> The Bongani Catchment was considered a pollution hotspot as far back as 2012, and the problems persist today.<sup>914</sup>

The Community Services Committee had taken water samples to measure the e-coli levels, providing an idea of the problem areas affecting the Knysna Estuary. Water samples taken from the Bongani River and Ashmead Channel in July and August 2016 indicated e-coli levels which were non-compliant with the approved standards.<sup>915</sup> As explained in chapter one, Ashmead Channel is a protected arm of

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<sup>908</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 109.

<sup>909</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 109.

<sup>910</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 109.

<sup>911</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age* 13.

<sup>912</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age* 13.

<sup>913</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age* 13.

<sup>914</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age* 14.

<sup>915</sup> Knysna Municipality *Portfolio Community Services Committee* 8.

the Knysna Estuary, and the Bongani River flows into the Knysna Estuary through Ashmead Channel.<sup>916</sup> In August, the e-coli levels had increased in the Bongani River and the Ashmead Channel.<sup>917</sup> The July report indicated that the final effluent from the municipal WWTW was compliant with standards, despite the e-coli levels in the Ashmead Channel being non-compliant.<sup>918</sup> This could be explained by the fact that the Bongani River is non-compliant and flows into the Ashmead Channel. The August report indicated the final effluent from the WWTW was non-compliant, contributing to the high levels of e-coli recorded.<sup>919</sup>

The Integrated Human Settlement Committee meeting of February 2017 indicated that mitigating measures to be taken would include chlorinating the Bongani River stream more regularly while more sustainable measures were being investigated.<sup>920</sup> The committee acknowledged in their agenda for April 2017 that Estuary Pollution Management is a strategic focus area of the committee.<sup>921</sup> For this reason, they report on matters such as water quality sampling, pollution control meetings and clean-up initiatives.<sup>922</sup>

From the fourteen water samples that were taken in January, the Ashmead Channel as well as two other points were among the non-compliant sampling points.<sup>923</sup> This is an overall decrease in the amount of non-compliant points from the previous sampling period.<sup>924</sup> They considered this decrease in the number of non-compliant points as an improvement in water quality which could be attributed to the chlorination attempts in December.<sup>925</sup> This report states that the Knysna Estuary Pollution Committee held three meetings in January 2017 in which their main points of discussion were the water sampling, the effluent from the WWTW as well as

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<sup>916</sup> See para 1.1.

<sup>917</sup> Knysna Municipality *Portfolio Community Services Committee* 15.

<sup>918</sup> Knysna Municipality *Portfolio Community Services Committee* 8.

<sup>919</sup> Knysna Municipality *Portfolio Community Services Committee* 15

<sup>920</sup> Knysna Municipality *Portfolio Integrated Human Settlements Committee* 34.

<sup>921</sup> Knysna Municipality *Portfolio Committee Planning Integrated Human Settlements Agenda* 31.

<sup>922</sup> Knysna Municipality *Portfolio Committee Planning Integrated Human Settlements Agenda* 31.

<sup>923</sup> Knysna Municipality *Portfolio Committee Planning Integrated Human Settlements Agenda* 32.

<sup>924</sup> Knysna Municipality *Portfolio Committee Planning Integrated Human Settlements Agenda* 32.

<sup>925</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 32.

current projects.<sup>926</sup> The report also states that the WWTW effluent was monitored and it was found that the ammonia level is above the special and general limit specified on the discharge licence for the WWTW.<sup>927</sup> The Integrated Human Settlement Committee stated in the February 2017 report that there was not enough information on the dynamics of the Knysna Estuary and its catchment to determine long-term solutions to the pollution issues.<sup>928</sup>

The February 2017 water sampling for e-coli showed that from the fourteen sampled water points, five were non-compliant including Ashmead Channel, Bongani, and the Bigai Rivers.<sup>929</sup> The Knysna Estuary Pollution Committee held four meetings in February 2017.<sup>930</sup> The WWTW water sampling indicated that the ammonia level was still too high for the special and general levels as per the discharge license.<sup>931</sup> The report still states that information regarding the dynamics of the Knysna Estuary is a problem.<sup>932</sup> As remedying actions, it suggests that detailed studies into long-term solutions should be undertaken and that an amount from the draft budget for Estuary Pollution Management would be allocated to this.<sup>933</sup> The recommendation was made to provide for an amount in the 2019/2020 municipal budget to conduct a study.<sup>934</sup>

On the 24<sup>th</sup> of March 2017, a discussion was held at the SANParks office between the various stakeholders to discuss issues relating to the Ashmead Channel and the Knysna Estuary. Representatives from SANParks, Knysna Municipality, Eden District

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<sup>926</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 32.

<sup>927</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 32.

<sup>928</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 32.

<sup>929</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 37.

<sup>930</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 37.

<sup>931</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 38.

<sup>932</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 39.

<sup>933</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Agenda* 39.

<sup>934</sup> Knysna Municipality *Planning & IHS Committee February 2019* 73.

Municipality,<sup>935</sup> independent specialists, and an NGO attended the meeting.<sup>936</sup> Various scientists and engineers from the Knysna Basin Project, NMMU,<sup>937</sup> and SANParks provided insight into the biological and scientific situation surrounding the Knysna Estuary at that time.<sup>938</sup> The collective stakeholders stated that the desired outcome of the Knysna Estuary is a system that is biophysically, socially, and economically sustainable, resilient, and adaptable.<sup>939</sup> The factors leading to the Knysna Estuary pollution were unpacked in detail, including poor management practices and the influence of town planning and settlement patterns.<sup>940</sup> Political will was mentioned as a large influence on the decreasing quality of the Knysna Estuary, specifically the issue of non-compliance regarding the WWTW, and a general lack of accountability or consequence.<sup>941</sup> At this time there was no memorandum of understanding between SANParks and the Knysna Municipality because the need for one was only voiced in October 2018.<sup>942</sup>

Bacterial water sampling from December 2017 and August 2018 indicated the Ashmead Channel and Bongani River did not comply with the standard levels of e-coli.<sup>943</sup> In February 2019, water samples showed no improvement in the water quality from the Bongani River, with the addition of four other sampling points that were non-compliant.<sup>944</sup> In addition, high counts of e-coli were sampled in the final effluent disposed into the Knysna Estuary from the Knysna WWTW, and the levels were noted as non-compliant.<sup>945</sup>

Among the activities conducted by the Infrastructure Services Committee in January 2020 was the appointment of the contractors for the upgrade of the WWTW inlet project as well as the project converting the WWTW from a Sequencing Batch

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<sup>935</sup> This was the former name of the Garden Route District Municipality.

<sup>936</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 17*.

<sup>937</sup> This is the abbreviation for the former name of Nelson Mandela University.

<sup>938</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 17*.

<sup>939</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 19*.

<sup>940</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 19*.

<sup>941</sup> Knysna Municipality *Portfolio Committees Planning & Integrated Human Settlements Age 19*.

<sup>942</sup> Knysna Municipality *Planning & IHS Committee February 2019 237*.

<sup>943</sup> Knysna Municipality *Community Services Committee February 2018 27*. See also Knysna Municipality *Community Services Committee October 2018 20*.

<sup>944</sup> Knysna Municipality *Community Services Committee February 2019 38*.

<sup>945</sup> Knysna Municipality *Community Services Committee February 2019 38*.

Reactor to a Nutrient Removal Plant.<sup>946</sup> The projects were expected to be completed in September 2020 and December 2020 respectively, however, as per the recorded information in the meeting agendas, the inlet project had only reached 100 per cent completion in April 2021, and the conversion project had recorded 99 per cent completion in August of 2021.<sup>947</sup> Both of these projects were awarded to the same contractor, with no reason given why the same contractor was used and if it might have been the only one available or not.<sup>948</sup> The AGSA report reported on unfair procurement, however, it cannot be conclusively said that this event is what the report was about, yet it does coincide with the year of the AGSA report.<sup>949</sup>

In February 2020 the Planning, Economic Development and Tourism Committee had discussions about implementing a programme aimed towards rehabilitating the Bongani Wetland to decrease the increasing levels of pollution.<sup>950</sup> The final report and accompanying recommendations for the rehabilitation would be presented in quarter four of that year.<sup>951</sup> It was only in November 2023 that the committee mentioned a request for the approval of an amount in the municipal budget for the rehabilitation of the Bongani Wetland project, which was subsequently denied and the only funds available to them was a much lesser amount already in the budget.<sup>952</sup>

A resolution was passed in March 2019 where the Acting Municipal Manager had to instruct other municipal managers to attend the Knysna Estuary Pollution Committee's meetings which SANParks co-ordinated.<sup>953</sup> The respective managers instructed to attend these meetings are from Water and Sanitation, Roads and Stormwater, Solid Waste and Environmental Management.<sup>954</sup> In 2022 the Environmental Management manager committed to co-ordinating the rehabilitation

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<sup>946</sup> Knysna Municipality *Infrastructure Services Committee: 8 July 2020* 22 to 23.

<sup>947</sup> Knysna Municipality *Infrastructures Services Committee: 26 April 2021* 77. See also Knysna Municipality *Infrastructures Services Committee: 23 August 2021* 35.

<sup>948</sup> Knysna Municipality *Infrastructures Services Committee: 23 August 2021* 35.

<sup>949</sup> See para 4.2.2.

<sup>950</sup> Knysna Municipality *Planning & Development Committee: 20 February 2020* 18.

<sup>951</sup> Knysna Municipality *Planning & Development Committee: 20 February 2020* 11.

<sup>952</sup> Knysna Municipality *Planning, Economic Development & Tourism Committee: 2 November 2023* 83.

<sup>953</sup> Knysna Municipality *Planning & IHS Committee April 2019* 10. See also Knysna Municipality *Integrated Human Settlements & Planning Committee: 22 February 2022* 229.

<sup>954</sup> Knysna Municipality *Planning & IHS Committee April 2019* 10.

of the Bongani River as it was one of the biggest sources of pollution to the Knysna Estuary.<sup>955</sup> Water and Sanitation committed to serving fines on those releasing unauthorised substances into the stormwater.<sup>956</sup> However, no mention was made about the state of the WWTW or the nature of the impact it had on the Knysna Estuary at that time.

#### *4.2.6.2 Alignment with principles, objectives, and duties*

The Knysna Municipality did attempt a mass effort to curb the pollution in the Knysna Estuary.<sup>957</sup> There was also an initiative to chlorinate the Bongani River more regularly.<sup>958</sup> This complies with their duty to adopt and implement strategies and plans to control the pollutants entering the Knysna Estuary.<sup>959</sup> However, the continuity of this initiative is questionable, and this strategy did not yield any long-term success.<sup>960</sup>

In 2017 the Integrated Human Settlement Committee stated that there was not enough information on the dynamics of the Knysna Estuary to determine long-term solutions to the pollution issues.<sup>961</sup> This goes against the precautionary principle.<sup>962</sup> A general lack of accountability and consequences was blamed for the factors leading to the Knysna Estuary's pollution.<sup>963</sup> This is an example of not complying with the principle of effective, transparent, and accountable governance.<sup>964</sup>

It was only in 2018 that the adoption of a memorandum of understanding was brought up.<sup>965</sup> The management authority was supposed to consult the Municipality and applicable aspects in the Municipality's IDP when preparing a management

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<sup>955</sup> Knysna Municipality *Planning & IHS Committee April 2019* 10.

<sup>956</sup> Knysna Municipality *Integrated Human Settlements & Planning Committee: 22 February 2022* 229.

<sup>957</sup> See para 4.2.6.1

<sup>958</sup> See para 4.2.6.1.

<sup>959</sup> See para 2.7 and 4.2.6.1.

<sup>960</sup> See para 4.2.6.1.

<sup>961</sup> See para 4.2.6.1.

<sup>962</sup> See para 2.7.

<sup>963</sup> See para 4.2.6.1.

<sup>964</sup> See para 2.7 and 4.2.6.1.

<sup>965</sup> See para 4.2.6.1.

plan.<sup>966</sup> While a memorandum of understanding is not required by law, some form of understanding should exist between the parties from this process.

The Infrastructure Services Committee did take on projects that would upgrade and convert the WWTW to a plant which prevents further nutrient pollution from entering the Knysna Estuary, which complies with the duty of care.<sup>967</sup>

Rehabilitating the Bongani Wetlands is a prime example of adhering to the duty to adopt plans or strategies to stop, control, or remedy pollutants from entering the Knysna Estuary.<sup>968</sup> However, the implementation of this plan took a long time to reach budgetary approval, and this was denied, which is in contradiction with the duty to draft municipal budgets to achieve environmental outcomes, as well as the obligation to use the Municipality's financial capacity to promote a safe and healthy environment.<sup>969</sup> The rehabilitation of the Bongani River was brought up in 2022 again, where the commitment was to serve fines on those releasing unauthorised substances into the stormwater, fulfilling their duty to use their administrative authority to manage the stormwater as well as conducting their business according to the polluter pays principle.<sup>970</sup>

Even though the Bongani project remains in limbo, it was mentioned that there was a maintenance management plan for the Bigai River that was completed at the end of May 2023 and was sent to the relevant departments for input before implementation.<sup>971</sup> The Bigai River is also a pollutant source, and this maintenance plan is an example of the Municipality fulfilling its duty to implement plans to control and remedy pollutants entering the Knysna Estuary.<sup>972</sup>

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<sup>966</sup> See para 2.6.3.

<sup>967</sup> See para 2.7 and 4.2.6.1.

<sup>968</sup> See para 2.7 and 4.2.6.1.

<sup>969</sup> See para 2.7 and 4.2.6.1.

<sup>970</sup> See para 2.7 and 4.2.6.1.

<sup>971</sup> Knysna Municipality *Planning, Economic Development & Tourism Committee: 15 June 2023.*

<sup>972</sup> See para 2.7 and 4.2.6.1.

#### *4.2.6.3 Application of the section 79 and 80 committees for estuarine management*

Estuary management is a strategic focus for the Integrated Human Settlements Committee. They report planned initiatives, such as water quality sampling and clean-up initiatives.<sup>973</sup> Overall, what was evident from the available meeting agendas was that it seemed as if the efforts focused on the Knysna Estuary became lacking, or lacked continuity.<sup>974</sup> Significantly fewer water sampling efforts were reported than in earlier years.<sup>975</sup> The efforts in motion, such as the inlet and conversion projects discussed above, took much longer than anticipated and did not seem to have an observable impact because the problem persists. Furthermore, the procurement of the contractor facilitating the project was questionable. The later agendas do not contain the water sampling levels to provide a quantitative confirmation of whether these projects had any sort of positive impact on the Knysna Estuary.<sup>976</sup> The efforts to chlorinate the stream provided a short-lived improvement, and from the available documents, it does not seem like it continued for too long after implementation.<sup>977</sup> In summary, a copious amount of time was spent making plans, holding meetings, and talking about what needed to be done, but commitment was lacking when it came to action.

To summarise, while the above-mentioned committees on paper contribute to the management of the Knysna Estuary, their actions lack proactive initiatives, and their attempts to rectify the problem linger too long to be put in motion, or do not carry on for long enough. Nevertheless, these committees can contribute to the management of the Knysna Estuary, and with more proactive actions, they might be able to create tangible change.

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<sup>973</sup> Knysna Municipality *Portfolio Committee Planning Integrated Human Settlements Agenda* 31.

<sup>974</sup> See para 4.2.6.1.

<sup>975</sup> See para 4.2.6.1.

<sup>976</sup> See para 4.2.6.1.

<sup>977</sup> See para 4.2.6.1.

## 4.2.7 Ward committees

### 4.2.7.1 Exposition

The *Constitution for Ward Committees of the Knysna Local Municipality* governs Knysna Municipality's wards, of which there are eleven.<sup>978</sup> *The Constitution for Ward Committees of the Knysna Local Municipality's* sole purpose is to provide uniform and simplified directives to such Committees.<sup>979</sup> Furthermore, it is made clear in the preamble of this constitution that the wards are established to help the Municipality fulfil its constitutional obligations.<sup>980</sup> This could be interpreted to include the environmental obligations as set out in section 24 of the *Constitution*.<sup>981</sup>

The municipal wards are divided so that the Knysna Estuary falls under both Ward 5 and Ward 9.<sup>982</sup> Ward 5 is to the west of the railway bridge, consisting of the upper and middle estuary regimes and Ward 9 is to the east of the railway bridge and consists of the large marine embayment regime.<sup>983</sup> Unfortunately, there are no documents available on the activities of the ward committees. What is known is that the wards have five top priorities as declared in the IDP which was discussed in detail above, and while Ward 5 does not list the pollution of the Knysna Estuary as a top priority, Ward 9 does list an effective management plan to prevent the degradation of the Knysna Estuary as well as stormwater management plan as a priority.<sup>984</sup> Furthermore, the IDP contains the list of issues the community raised per ward, which ties in with ward committees acting as the mechanism for public participation, as discussed above.<sup>985</sup>

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<sup>978</sup> Knysna Municipality *Constitution for Ward Committees of the Knysna Local Municipality* 1.

<sup>979</sup> Knysna Municipality date unknown <https://tinyurl.com/kx87rk84>.

<sup>980</sup> Knysna Municipality *Constitution for Ward Committees of the Knysna Local Municipality* 1.

<sup>981</sup> Section 24 of the *Constitution*.

<sup>982</sup> Knysna Municipality *Annexure 13 Knysna Municipality Wards Overview 2022*.

<sup>983</sup> Western Cape Government, Department of Environmental Affairs & Development Planning *Knysna River Estuarine Management Plan* 14.

<sup>984</sup> Knysna Municipality *2023 Integrated Development Plan* 183 and 188.

<sup>985</sup> Knysna Municipality *2023 Integrated Development Plan* 214 and 237. See para 3.3.4 and 4.2.5.

#### *4.2.7.2 Alignment with principles, objectives, and duties*

While it is difficult to say whether the ward committees adhere to the principles, objectives, and duties relevant to estuaries, the discussion on public participation shows that the members of the public from the respective wards have voiced their concerns regarding the Knysna Estuary.<sup>986</sup> One can only assume that the recommendations were made to the municipal council, as these concerns were noted in the IDP, thus promoting participation for persons with an interest in the environment.<sup>987</sup>

#### *4.2.7.3 Application of the ward committees for estuarine management*

It is difficult to fully review the Knysna Municipality's ward committees' contribution to estuarine management, because of the limited available sources. A ward committee must make recommendations to the council regarding their ward. Considering the community's priorities were included in the IDP, it is assumed they fulfilled this directive.<sup>988</sup>

### **4.3 Concluding remarks**

This chapter critically reviewed the specific LEG instruments of the Knysna Municipality to determine whether and how they are used to contribute to the management of the Knysna Estuary.

At first glance, it seems like the Municipality is utilising its available LEG instruments to contribute to the management of the Knysna Estuary. This conforms with the provision in the *NEMA* that an estuary impacted by human activities must receive special consideration in management and development processes.<sup>989</sup>

However, looking into the situation in more detail, it becomes clear that the Estuary is not being adequately considered in the management and development decisions

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<sup>986</sup> See para 4.2.5.3.

<sup>987</sup> Knysna Municipality *2023 Integrated Development Plan* 183 and 188. See para 2.7.

<sup>988</sup> See para 3.3.4.

<sup>989</sup> See para 2.4.1.

represented by the instruments. Furthermore, the IDP needs more advanced environmental objectives through better alignment with the principles, objectives, and duties. Bringing about these changes can then flow into the other instruments and promote a change in the pollution situation.<sup>990</sup> The municipal by-laws are to some extent utilised to contribute to the management of the Estuary, with the largest factor being the prohibition of pollution.<sup>991</sup> However, there are some by-laws, the *Zoning Scheme By-law* to be exact, in need of an update to reflect better contribution to the management of the Estuary.<sup>992</sup>

While public participation and ward committees allow the community to voice their concerns regarding the environment, and support the Municipality's decisions and processes, they do not guarantee that action will be taken to resolve those concerns.<sup>993</sup> From what is communicated by the documentation of the section 79 and 80 committees, there is a shortage of actions that would bring about tangible differences.

Where the Municipality applied their LEG instruments to mitigate a problem, such as the committees sampling water, chlorinating streams or upgrading the WWTW, it showed little to negligible success.<sup>994</sup> There were no conclusive reports on whether the projects meant to improve the WWTW had any positive effect on the Knysna Estuary, and the procurement of the contractor responsible for those projects has raised flags. The audit opinion from the AGSA on unfair procurement substantiates this argument.

The AGSA audit opinion further found that the Municipality does not have the necessary competent staff to manage its affairs.<sup>995</sup> This would include the affairs and activities of the external influences on the Knysna Estuary. The e-coli pollution has been a recognised problem since 2009 and is still an ongoing issue.<sup>996</sup> The

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<sup>990</sup> See para 4.2.1.3 and 3.5.

<sup>991</sup> See para 4.2.4.3.

<sup>992</sup> See para 4.2.4.1.6.

<sup>993</sup> See para 3.5 and 4.2.5.2.

<sup>994</sup> See para 4.2.6.3.

<sup>995</sup> See para 4.3.

<sup>996</sup> See para 4.2.6.

responsible directorates for the strategic areas which are necessary to mitigate the pollution problem have not found viable solutions to conclusively solve the problem yet. Moreover, there is no way of seeing whether the directorates are efficiently and effectively working to solve the problem. The problem has been dragging on for too long which indicates that there is no efficient and effective work being conducted to find solutions. The audit opinion from AGSA substantiates this by stating that all the directorates need to improve their internal controls and create a performance management system.<sup>997</sup>

To put it plainly, the LEG instruments suggest that the Municipality is aware of the pollution problem, knows its causes, and knows it needs to be rectified. The instruments provide a way for the Municipality to indicate how they would resolve the pollution problem. Yet, the LEG instruments do not provide a way to ensure that the pollution problem will be fixed. Therefore, the Knysna Municipality's LEG instruments in their current state do not achieve significantly in contributing to the management of the Knysna Estuary. While the instruments can benefit from more creative environmental objectives aimed at the Knysna Estuary, accountability for adhering to the objectives already prescribed by the instruments is vital, otherwise, the instruments are useless for achieving the desired outcomes.

The information gathered in this chapter and previous chapters form a basis for a conclusion and recommendations. The conclusion and recommendations on using the Knysna Municipality's LEG instruments to advance contribution to the management of the Knysna Estuary will be discussed in chapter five.

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<sup>997</sup> See para 4.3.

## CHAPTER 5 CONCLUSION

### 5.1 *Background and context of the study*

This study set out to provide a critical review of the LEG instruments at the disposal of Knysna Municipality prescribed by law to determine whether and how they are utilised to contribute to the management of the Knysna Estuary.<sup>998</sup> The Estuary is undeniably a valuable ecological asset and its biodiversity and conservational importance have been highlighted in chapter one of this study.<sup>999</sup> Still, the Knysna Estuary is faced with threats, some of which are widespread and general threats such as climate change, and others that are unique to Knysna, such as the pollution from the Bongani River, the local stormwater system, and the Knysna WWTW.<sup>1000</sup> While the Knysna Estuary is under the management of SANParks, the Knysna Municipality has jurisdiction over the surrounding area, and as such can have a hand in ensuring the Estuary is protected.<sup>1001</sup>

Chapter two examined the *Constitution*, framework local government law, framework national environmental law, sectoral environmental law and provincial law to reflect on the role of local government in estuarine management.<sup>1002</sup> Furthermore, this chapter distilled the principles, objectives, and duties in the *Constitution* and statutory framework relevant to local government's contribution to the management of estuaries. Chapter two served as the theoretical basis for the remainder of the analysis in this study.<sup>1003</sup> Municipalities have been awarded original functions and powers that have an impact on an estuary and can, therefore, contribute to its management despite the environment not forming part of their core functional areas.<sup>1004</sup> Case law was consulted which also supported the notion that a municipality's functional areas are closely related to the environment, and as such

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<sup>998</sup> See para 1.2.

<sup>999</sup> See para 1.1.

<sup>1000</sup> See para 1.1.

<sup>1001</sup> See para 1.1.

<sup>1002</sup> See para 2.1.

<sup>1003</sup> See para 2.8.

<sup>1004</sup> See para 2.2.3.3.

can enable a municipality to contribute to the management of an estuary.<sup>1005</sup> The provision of original powers influencing an estuary along with the repeated specifications of co-operative governance to achieve environmental objectives showed that municipalities have a significantly larger and more integrated role to play in the management of the environment, including an estuary, than is led to believe.<sup>1006</sup> Furthermore, municipalities are prescribed environmental principles, objectives, and duties they should adhere to whenever performing their executive and legislative authority.<sup>1007</sup> These principles, objectives, and duties are geared towards positive influences on an estuary and the broader environment.<sup>1008</sup> Thus, incorporating the principles, objectives, and duties into municipal activities, albeit voluntarily, should provide a relatively effortless mechanism to achieve environmental objectives, and could contribute to the management of the Estuary.<sup>1009</sup>

Chapter three discussed a set of LEG instruments conceptualised by scholars in the local government field. It further set up the theoretical basis for how the Municipality can contribute to the well-being of the Knysna Estuary using these LEG instruments.<sup>1010</sup> The discussion illuminated the instrument categories and how they relate to the functioning of municipalities.<sup>1011</sup> It was found that the instruments should be ideal for achieving environmental outcomes because they function as regulatory tools for the internal activities of the Municipality and a selection of activities in the municipal area.<sup>1012</sup> The boundaries of these instruments are fluid, providing a way for environmental objectives to flow from one to the other. Seeing as the instruments are prescribed by law, utilising them to contribute to the Knysna Estuary's management by adhering to the principles, objectives and duties also

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<sup>1005</sup> See para 2.7.

<sup>1006</sup> See para 2.8.

<sup>1007</sup> See para 2.2.3.

<sup>1008</sup> See para 2.7.

<sup>1009</sup> See para 2.8.

<sup>1010</sup> See para 3.1.

<sup>1011</sup> See para 3.2.

<sup>1012</sup> See para 3.2 and 3.5.

prescribed by law should be a relatively undemanding task, but very dependent on the will of the Municipality.<sup>1013</sup>

Chapter four provided a critical review of the LEG instruments of the Knysna Municipality. The Knysna Municipality's instruments distilled in chapter three were used to benchmark if and how the Municipality is or could be contributing to the management of the Knysna Estuary.<sup>1014</sup> These instruments were reviewed for the inclusion of the principles, objectives and duties discussed in chapter two.<sup>1015</sup> The study relied on the information the Municipality has made available on its website, considering it is a desk-based study.<sup>1016</sup> The discussion on Knysna Municipality's instruments created a partial picture of the Municipality's contribution to the management of the Estuary along the lines of past, present and prospective activities.<sup>1017</sup> The picture is that, while the Knysna Municipality's LEG instruments have the potential to contribute to the Estuary's management, there is a lack of action or will to solve the pollution issue.

The findings of this study were formed based on the review of the instruments in chapter four albeit also in the context of the relevant theory and academic discourse.

## ***5.2 Main findings***

The main findings of this study are:

- The Knysna Estuary's ecological and economic value lends it to legal protection.<sup>1018</sup> The Knysna Estuary is an environmental asset, forming part of the public trust and affecting the realisation of some basic human rights provided for in the Bill of Rights.<sup>1019</sup> A compromise of the Knysna Estuary's health could lead to the infringement of rights and legally embedded interests such as a safe and healthy environment and social and economic

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<sup>1013</sup> See para 3.5.

<sup>1014</sup> See para 4.1.

<sup>1015</sup> See para 2.7.

<sup>1016</sup> See para 1.4.

<sup>1017</sup> See para 4.2.

<sup>1018</sup> See para 2.2.1.

<sup>1019</sup> See para 2.2.1 and 2.2.2.

development.<sup>1020</sup> Therefore, to co-responsibly realise the right to a safe and healthy environment and fulfil its developmental mandate, the Knysna Municipality must balance sustaining the ecology of the Estuary and promoting the social and economic interests relating to the Estuary.<sup>1021</sup>

- While a municipality does not have the powers and functions to manage an estuary directly, it does have legislative and executive authority over functional areas, the regulation of which ultimately do impact estuaries.<sup>1022</sup> Managing these functional areas by incorporating the principles, objectives, and duties should provide a relatively effortless mechanism to achieve environmental objectives and contribute to the management of an estuary.<sup>1023</sup> Thus, it should not intrude on the autonomy of the other spheres of government to manage an estuary but allow municipalities to exercise their competency co-operatively.<sup>1024</sup>
- Areas under the Knysna Municipality's competency, such as the WWTW and stormwater system, are the root cause of pollution and ecological degradation in the Knysna Estuary.<sup>1025</sup> This is caused by the mismanagement of the functional areas due to inadequacies from a financial, human resource, or governance perspective.<sup>1026</sup> The Municipality's inability to provide these basic municipal services in a way that promotes a safe and healthy environment and is environmentally sustainable contradicts its statutory obligation.<sup>1027</sup>
- South Africa's framework local government and environmental law provides for LEG instruments that the Municipality may use to fulfil environmental obligations.<sup>1028</sup> These instruments are ideal because municipalities are

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<sup>1020</sup> See para 2.2.1 and 2.2.2.

<sup>1021</sup> See para 2.2.1.

<sup>1022</sup> See para 2.2.3.3.

<sup>1023</sup> See para 2.7.

<sup>1024</sup> See para 2.2.3.2.

<sup>1025</sup> See para 1.1.

<sup>1026</sup> See para 4.2.4.1.5.

<sup>1027</sup> See para 2.3.1.

<sup>1028</sup> See para 1.1.

prescribed by law to develop and administer them, and the inclusion of more substantive environmental considerations in the form of principles, objectives, and duties should not greatly affect the Municipality's financial capacity or workforce.<sup>1029</sup> The LEG in this study are intertwined, and their boundaries are fluid, such that including environmental objectives in the IDP is critical.<sup>1030</sup> There is no limitation to what can be included in the IDP, therefore, it is up to the discretion of the Municipality to wield the instruments in a way that would contribute to the management of the Knysna Estuary.<sup>1031</sup>

- Knysna Municipality's LEG instruments lend themselves toward potentially contributing to the management of the Knysna Estuary.<sup>1032</sup> However, the instruments fall short in reaching their potential eluded to in this study in the following aspects:
  - On paper, the IDP rarely adheres to the principles, objectives and duties and fails to adequately consider the Knysna Estuary as a vulnerable ecosystem in development decisions in terms of Section 46 of the *NEMA*.<sup>1033</sup> Furthermore, it is missing important environmental management plans such as the Biodiversity Management Plan, and Municipal Coastal Management Programme.<sup>1034</sup>
  - The municipal budget is underutilised to contribute to the management of the Knysna Estuary.<sup>1035</sup> Knysna Municipality does not seem to spend enough on maintaining and upgrading the infrastructure polluting the Knysna Estuary.<sup>1036</sup> Furthermore, it is not

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<sup>1029</sup> See para 3.5.

<sup>1030</sup> See para 3.5.

<sup>1031</sup> See para 3.5.

<sup>1032</sup> See para 4.3.

<sup>1033</sup> See para 4.3 and 2.7.

<sup>1034</sup> See para 4.2.1.2.5.

<sup>1035</sup> See para 4.2.2.2.

<sup>1036</sup> See para 4.2.2.3.

clear if the environmental considerations the budget accounts for include the Knysna Estuary.<sup>1037</sup>

- The Municipality does not adhere to the KPIs for the general wastewater outflow standards set in the SDBIP, thus not complying with the commitments it made.<sup>1038</sup>
- The by-laws prohibit pollution and ecological degradation.<sup>1039</sup> However, no provisions hold the Municipality accountable for the pollution from the WWTW discharge.<sup>1040</sup> The officials in charge of enforcing the by-laws are mostly employees of the Municipality, thus there is no incentive to act against the Municipality.<sup>1041</sup> Furthermore, The *Zoning Scheme By-Law* must be updated to prohibit further developments in the 5-metre contour line.<sup>1042</sup>
- On paper, the section 79 and 80 committees have the appropriate powers to contribute to the management of the Estuary.<sup>1043</sup> They have implemented some initiatives to contribute to the Estuary's management.<sup>1044</sup> However, these initiatives are remedial and lack proactive actions.<sup>1045</sup> Their attempts to mitigate the problem are hollow, bringing no long-term solutions.<sup>1046</sup> There is no account in the available documentation of the Knysna Estuary Pollution Committee's duties or any tangible contribution to the Estuary's management.<sup>1047</sup>
- Public participation and ward committees indicated that the appropriate channels are in place for the community to voice their

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<sup>1037</sup> See para 4.2.2.3.

<sup>1038</sup> See para 4.2.3.3.

<sup>1039</sup> See para 4.2.4.3.

<sup>1040</sup> See para 4.2.4.3.

<sup>1041</sup> See para 4.2.4.3.

<sup>1042</sup> See para 4.2.4.3.

<sup>1043</sup> See para 4.2.6.3.

<sup>1044</sup> See para 4.2.6.3.

<sup>1045</sup> See para 4.2.6.3.

<sup>1046</sup> See para 4.2.6.3.

<sup>1047</sup> See para 4.2.6.3.

concerns.<sup>1048</sup> However, the Municipality is not managing the pollution as per the community's requests. The will of the Municipality is a large factor in the effectiveness of public participation and ward committees as LEG instruments.<sup>1049</sup>

- The set of LEG instruments will only reach their full potential if the Municipality has the intention and will to implement the environmental objectives set out therein.<sup>1050</sup> The success of these instruments relies too much on the will of the Municipality, and not enough on a statutory obligation to use them for environmental objectives.

### ***5.3 Recommendations***

Considering the above findings, the following recommendations are made for the advancement of estuarine management through LEG instruments:

- Knysna Municipality must improve its financial and administrative capacity and capability to manage its functional areas to protect the Knysna Estuary. More money should be spent on maintaining and upgrading the WWTW and stormwater systems infrastructure, and the Municipality must fill vacancies with competent staff to carry out this task. Knysna Municipality must act proactively and preventatively to provide long-term solutions to the issues arising from their functional areas, such as the WWTW, the Bongani Catchment area, and stormwater drainage systems.
- Knysna Municipality should consider investigating external mechanisms, such as community-based or non-governmental organisations, that are legally competent to enter into a service delivery agreement with the Municipality, for delivering its basic municipal services.

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<sup>1048</sup> See para 4.2.5.2 and 4.2.7.3.

<sup>1049</sup> See para 4.2.5.3.

<sup>1050</sup> See para 4.3

- Knysna Municipality must better wield their LEG instruments by promoting the principles, objectives, and duties prescribed by the law to contribute to the management of the Knysna Estuary. The environmental plans missing in the IDP must be drafted and adopted, and the Estuary must be considered in all development decisions that would affect it. The by-laws must be updated to reflect the Municipality's development decisions impacting the Estuary. The committee's initiatives need to translate into proactive and preventative action. The committees' internal controls and performance management systems need to be improved and modified to evaluate their output for contributing to the management of the Estuary. Furthermore, the Municipality must comply with the commitments made by the LEG instruments and exercise the will to implement the environmental objectives they communicate.
- Knysna Municipality may need to consider the adoption of EMCAs with non-governmental organisations that could aid in holding the Municipality accountable for non-compliance with the *NEMA* principles.

#### ***5.4 Limitations of study***

It must be acknowledged that this study had its limitations. The limitations are mainly due to the methodology used and the content discussed in the study. It was a desk-based study, which limited the gathering of information which may have been valuable for evaluating the LEG instruments of the Knysna Municipality. The study also used a limited set of LEG instruments as a benchmark and did not include an exhaustive list of LEG instruments. The study depended on the documents that the Knysna Municipality had made publicly accessible and relied solely on what was communicated therein. In some instances, the documents lacked clarity on certain aspects. An empirical study and interviews with the municipal staff responsible for drafting the LEG instruments may have been beneficial for a more comprehensive evaluation of the instruments in chapter four. However, due to time and financial constraints such an empirical study could not be considered for this study.

Furthermore, the study only focuses on the theoretical application of the principles, objectives, and duties and does not consider the viability of real-life applications. The Knysna Municipality's LEG instruments were evaluated purely according to a theoretical benchmark and were not measured against another municipality's LEG instruments as a baseline or comparable study. As a result, the study focuses only on the ideology of using LEG instruments for environmental outcomes and does not fully consider the practicality of effective implementation.

The study was geographically limited to the South African context and more specifically the Western Cape Province. South African national framework local government and environmental law were explored. In the provincial sphere, the available provincial laws of only the Western Cape were explored. The study did not venture into a full-blown investigation of the role of all the government actors in all three spheres of government that are co-responsible for estuarine management.

### ***5.5 Remaining knowledge gaps***

The following questions may form the basis of future studies in the area of estuarine management seen from a legal lens:

- How can environmental law be used to compel local government to render basic municipal services where the failure of such causes ecological degradation?
- Are there provisions in local government law for a LEG instrument measuring a municipality's performance in preventing pollution and ecological degradation?
- Can a municipality be compelled, in terms of the law, to adopt or adjust LEG instruments to achieve environmental obligations?
- Does the law provide for non-state organisations to hold a municipality accountable for non-compliance with environmental obligations?

- Are there any legal mechanisms that can force a municipality to show accountability for their actions resulting in ecological degradation?

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