

Topic: A critical analysis of the NEM: ICMA as it pertains to development within the Coastal Protection Zone of Proclaimed Fishing Harbours in the Western Cape

ABSTRACT

With the promulgation and enactment of the National Environmental Management: Integrated Coastal Management Act (NEM: ICMA) on 1 December 2009, a paradigm shift in coastal management has occurred in South Africa. This paper aims to address selected sections of the NEM: ICMA, as well as other pertinent marine legislation such as the Marine Living Resources Act (MLRA), Act No. 18 of 1998 (as amended) with a specific focus on critically analysing the NEM: ICMA in terms of its effectiveness and related shortcomings as it pertains to development within Proclaimed Fishing Harbours (PFHs).

This analysis was prompted by a history of development within PFHs being significantly hampered by resistance from the general public. Three case studies will be used throughout this paper to highlight that proposed development within a PFH for the purpose of fishing related activities is, in most instances impeded by the people it is intended to benefit. This paper explores whether the NEM: ICMA meets the requirements of the need to develop within PFHs, as well as the need to ensure sustainable development within the coastal protection zone.

INTRODUCTION

South Africa has a magnificent coastline that stretches some 3 000 km and traverses from the west coast to the east coast. The Western Cape has the longest coastline at approximately 1 000 km when compared with other provinces in South Africa (SOER, 2005). Our coastline supports a myriad of economic activity from commercial entities such as fisheries (processing plants and handling facilities), tourism-related developments such as hotels and recreational facilities to residential development.

As a consequence of rapid development and coastal management regulation which aren't as strict as they could be, negative impacts are occurring. This trend is noted in the conclusions drawn in the State of the Environment Report (2006), which says: "issues of concern for the marine environment have recently arisen or continue to pose threats, namely:

- Increasing uncontrolled coastal development leading to habitat degradation and changing land-use patterns
- Substantial increase in the amount of wastewater discharged into the marine environment"

The current 'buzzword' is Integrated Coastal Management (ICM) but what is ICM and why do we need it? Briefly, as quoted from Celliers, et al. (2009), ICM "promotes the use of defensible scientific information in conjunction with the principles of cooperative governance in order to achieve sustainable coastal development". It is clear there is a need to address the inappropriate exploitation of the South African coastline.

The primary aim of this paper is to give a critical analysis of the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008), which was enacted on 1 December 2009 in Government Notice 32765, (referred to here as NEM: ICMA) with specific reference to its application to the Coastal Protection Zone (CPZ) within Proclaimed Fishing Harbours (PFHs). The paper also aims to address its effectiveness and associated shortcomings in the context of coastal development within the CPZ of PFHs in the Western Cape.

METHODS

There are currently twelve listed PFHs within the Western Cape. Three of these, Hout Bay, Gordon’s Bay and Struisbaai, will be used to illustrate, in practical terms, how coastal development within PFHs are being affected. The most recent application of NEM: ICMA has been engendered by the proposed development within the Struisbaai harbour.

PRINCIPLES FOR COASTAL MANAGEMENT

The NEM: ICMA is informed by the National Environmental Management Act¹ (NEMA) principles as adapted for the coastal zone in the nationally adopted White Paper for Sustainable Coastal Development in South Africa (DEAT, 2000 cited in Celliers et al., 2009).

The principles of the NEM: ICMA are summarised in the table below:

PRINCIPLE	DESCRIPTION
National Asset	The coast must be retained as a national asset, with public rights to access and benefit from the opportunities provided by coastal resources.
Economic Development	Coastal economic development opportunities must be optimised to meet society’s needs and to promote the well-being of coastal communities.
Social Equity	Coastal management efforts must ensure that all people, including future generations, enjoy the rights of human dignity, equality and freedom.
Ecological Integrity	The diversity, health and productivity of coastal ecosystems must be maintained and, where appropriate, rehabilitated.
Holism	The coast must be treated as a distinctive and indivisible system, recognising the interrelationships between coastal users and ecosystems, and between the land, sea and air.
Risk Aversion & Precaution	Coastal management efforts must adopt a risk averse and precautionary approach under conditions of uncertainty.
Accountability & Responsibility	Coastal management is a shared responsibility. All people must be held responsible for the consequences of their actions, including financial responsibility for negative effects.
Duty of Care	All people and organisations must act with due care to avoid negative impacts on the coastal environment and coastal resources.
Integration & Participation	A dedicated, coordinated and integrated coastal management approach must be developed and conducted in a participatory, inclusive and transparent manner.
Cooperative Governance	Partnerships between government, the private sector and civil society must be built in order to ensure co-responsibility for coastal management and to empower stakeholders to participate effectively.

Table 1: National Environmental Management Act Principles as adapted for the coastal zone of South Africa (taken from DEAT, 2000 cited in Celliers et al. 2009).

UNDERSTANDING THE COASTAL PROTECTION ZONE (CPZ)

Before we commence with the critical analysis of the NEM: ICMA, it is prudent to define and graphically illustrate (Figure 1) the CPZ as it forms an integral part of the assessment of development within PFHs. Celliers, et al. (2009) explains that the CPZ consists of a continuous strip of land, starting from the High

¹Act No. 107 of 1998 (as amended).

Water Mark² (HWM) and extending 100 metres inland in developed urban areas zoned as residential, commercial, or public open space, or 1 000 metres inland in areas that remain undeveloped or that are commonly referred to as rural areas.

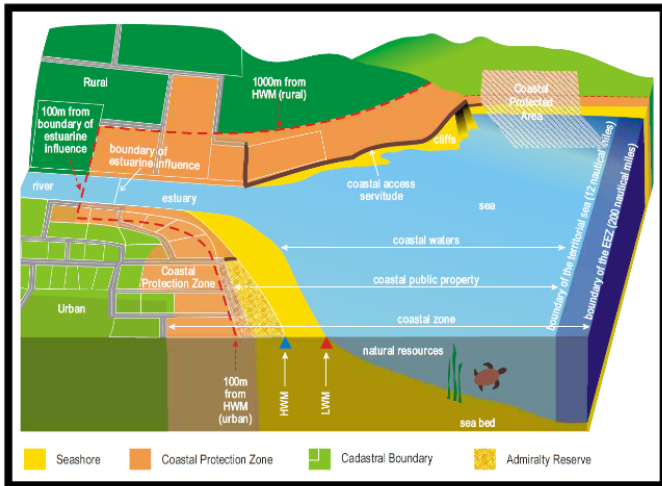


Figure 1: The Coastal Zone of South Africa
Source: Celliers, et al., 2009

There are however some provisions in order to justify certain adjustments to this zone. The CPZ is established to manage, regulate and restrict the use of land that is adjacent to coastal public property, or that plays a significant role in the coastal ecosystem.

DISCUSSION

PROBLEM STATEMENT

Given the description of the CPZ, a problem emerges for development, since PFHs are always located within 100m of the HWM. To assess the effectiveness of the NEM:ICMA, Saddler (2008) lists key perspectives from which the criteria for a critical analysis of the effectiveness of such an Act can be derived:

- Effectiveness and performance are interlocking ‘measures’ of success of the NEM: ICMA
- Effectiveness review asks if the process and elements of approach function satisfactorily
- Performance review focuses on the results and outcomes
- Related concepts include efficiency, fairness and efficacy (is this the best approach to do the job?)
- New attention given to frameworks and measures for undertaking systematic, empirically-based evaluations of effectiveness of EIA at different levels and for particular components.

LEVELS OF EFFECTIVENESS REVIEW

Saddler (2008) proposed various levels of effectiveness criteria upon which to evaluate Environmental Impact Assessment (EIA) effectiveness. This approach has been adapted in this paper to consider the effectiveness of the NEM: ICMA:

² The term high-water mark “means the highest line reached by coastal waters, but excluding any line reached as a result of — (a) exceptional or abnormal floods or storms that occur no more than once in ten years; or (b) an estuary being closed to the sea” (NEM: ICMA, 2008).

- **Meta-evaluation** – relative success and utility of the NEM: ICMA as a legislated tool for managing the impact of proposals on the coastal environment
- **Macro-evaluation** – effectiveness and performance of ICM systems established by particular countries or international agencies
- **Micro-evaluation** – role and contribution of ICM approach and components to specific proposals, value added at specific stages
- At each level, the anatomy of the NEM: ICMA's effectiveness can be dissected in relation to institutional, methodological and practical dimensions.

In order to achieve the level of assessment required to arrive at an objective determination of the NEM: ICMA's effectiveness, the above approach is advisable, however owing to limited resources, the critical analysis will be of a subjective nature in the sections to follow. Where possible, literature will be utilised to provide a more objective opinion.

PROCLAIMED FISHING HARBOURS: A CONTEXTUAL OVERVIEW

The MLRA³ defines a fishing harbour⁴ as “a declared fishing harbour contemplated in Section 27(1)”, which reads as follows: “Subject to subsection (2), the Minister may by notice in the *Gazette* declare a harbour or a defined portion of a harbour or a defined area of the sea and the seashore, to be a fishing harbour:

(2) If the Minister desires to declare a commercial harbour or a portion of such harbour to be a fishing harbour, he or she shall obtain the prior approval of the Minister of Transport.

(3) The Minister may, in consultation with the Minister of Finance, determine the fee payable in respect of the use of a fishing harbour or the facilities available in such a harbour”.

The Western Cape currently has twelve PFHs: Lamberts Bay, St Helena, Laaiplek, Saldanha Bay, **Hout Bay**, Kalk Bay, **Gordon's Bay**, Hermanus, Gansbaai, Arniston, Stilbaai and **Struisbaai** (DEAT, 2008).

CASE STUDY

Case studies are used to best provide a hands-on assimilation of the effect that the NEM: ICMA has in practice.

PFHs are governed by the National Department of Public Works (NDPW), with the assistance of Marine and Coastal Management performing functional management duties.

Anyone that is familiar with the PFHs in the Western Cape will generally conclude that the infrastructure viz. buildings, roads and bulk services are often in a state of disarray. This conclusion is supported by the 'Fishing Harbours Transitions Project', whereby DEAT and the NDPW initiated an assessment to “unlock economic potential within these harbours, in particular, those options related to tourism and economic development” (DEAT, 2008).

DEAT (2008) states that the following key factors have been considered in the assessment:

- Economic changes

³Marine Living Resources Act (Act No. 18 of 1998), as amended.

⁴Section 1 (xix), Marine Living Resources Act (Act No. 18 of 1998).

- Changes in fish stocks
- Impact on local/surrounding community
- Infrastructure development
- Socio-economic impact
- Tourism development
- Real estate
- Legal issues

The assessment has been concluded but to date, the results of the assessment have not been made available to the public. It cannot be stressed enough that in as much as development within PFHs is required⁵, the potential exists to impact on the environment, more specifically within the CPZ.

As shown in section 2.2, the CPZ criteria applied to urban areas mean a distance inland of 100 metres measured from the high water mark. This essentially means that almost all development within PFHs would result in development within the CPZ as defined in the NEM: ICMA⁶.

This reality results in a host of challenges since no provision has been made for ‘harbour infrastructure and/or precincts’. This is the central and most fundamental issue that needs to be addressed in respect to the NEM: ICMA.

THE CPZ PARADIGM, A CONSTRUCTIVE DILEMMA

In the context of PFHs, an issue consistently arises when wanting to develop either ‘fishing related industry’ such as a fish processing plant or a crayfish holding facility. This is further extended to tourism related infrastructure in the form of integrated development options which could comprise retail (blast freezing and fishing equipment) and hospitality services (e.g. hotel).

The table below provides both the PFH and its related development proposal between 2002 to 2013 which will be used as case studies.

PFH	Proposed Development
Hout Bay	Crayfish and Fish Meal Processing Plant.
Gordon’s Bay	Crayfish Holding and Tourism related Facility.
Struisbaai*	Multi-functional retail, fractional ownership and hotel development.

Table 2: Case Study PFHs and related development applications (period: 2002 to 2013).

* **NOTE:** The proposed site is privately owned, however within the immediate PFH precinct and is therefore deemed comparable with the latter case studies listed in the table above.

The crux of the development dilemma resides with one common characteristic which applies to each of the case studies listed above. In as much as the harbours in question have been proclaimed as ‘fishing harbours’ in accordance with the MLRA, immense resistance to development from the general public occurred for each development proposed. Ironically, both the Hout Bay and Gordon’s Bay proposed developments are consistent with the very nature and intent of a PFH. It stands to reason that each of the proposed developments warranted an Environmental Impact Assessment (EIA) that is more

⁵By virtue of the fact that DEAT and the NDPW have initiated the Fishing Harbours Transition Project.

⁶Section 17, Act No. 24 of 2008.

substantive and detailed than a Scoping Checklist and Scoping Report in terms of the Environment Conservation Act⁷ or a Basic Assessment in terms of the National Environmental Management Act⁸.

When undertaking the requisite EIA, public engagement (and opposition) consistently manifested themselves as a major hurdle in terms of resolving conflict, which in essence cascaded to the decision-making authorities having to weigh up the respective anticipated environmental impacts with that of fishing related development within PFHs.

The above dilemma continues to prevail, since the NEM: ICMA emphasises the need to ensure public engagement when planning to construct certain types of infrastructure within the CPZ⁹. The requirement of having to undertake an EIA in terms of Section 63 (1) of the NEM: ICMA is necessary to aid the developer in understanding the potential impacts that the proposed development could have on the receiving environment and *vice versa*. Also, this approach, in theory, assists the decision-making authority¹⁰ to arrive at an informed decision whether to authorise the development or not. It is further noted that even if an environmental authorisation (formerly known as a Record of Decision in terms of the Environment Conservation Act) is granted, a number of other additional legislated processes may be required, such as the rezoning of the proposed site, permits for the release of effluents and/or air emissions and so on.

A constrictive dilemma emerges for each of these case studies. In general, development is simply not supported by residents in close proximity to PFHs. The result arises that development is halted due to extended EIA processes, which almost inevitably trigger appeals and in the case studies considered might be followed by an application for judicial review¹¹.

WHAT DOES THE NEM: ICMA HOLD IN STORE FOR DEVELOPMENT WITHIN PFHs?

Literature with respect to PFHs is, for the most part, extremely limited. The following books broadly cover some of the salient points in terms of the marine and coastal law: Fuggle & Rabie (2009), Kidd (2008) and Glazewski (2005).

As stated in section 3.2 of this paper, PFHs are proclaimed in terms of Section 27 (1) of the MLRA¹². The NEM: ICMA provides various mechanisms that could be of benefit to development within PFHs or it could result in delayed development and/or restriction of use. Specific attention is now drawn to Chapter 6 of the NEM: ICMA which regulates "Coastal Management".

COASTAL MANAGEMENT PROGRAMMES AND COASTAL PLANNING SCHEMES: THE BEGINNING OR THE END?

When considering coastal management solutions, the NEM: ICMA has provided us with two innovative tools which can aid ICM. The first tool is termed a Coastal Management Programme (CMP), which is defined as "the national or a provincial or municipal coastal management programme established in terms of Chapter 6 (NEM: ICMA, 2008)". Celliers et al. (2008) states that CMPs are developed in all three spheres of government which can be represented as follows:

⁷Act No. 73 of 1989, GN 1183 (5 September 1997, as amended).

⁸Act No. 107 of 1998, as amended, GN 386 (21 April 2006).

⁹Limited in this case to urban areas, thus 100 meters from the high water mark in a landward direction.

¹⁰In the Western Cape the competent authority is the Department of Environmental Affairs and Development Planning.

¹¹See for example, Greys Marine Hout Bay (Pty) Ltd and Others v Minister of Public Works and Others (347/2004) [2005] ZASCA 43; [2005]

3 All SA 33 (SCA) (13 May 2005).

¹²Act No. 18 of 1998.

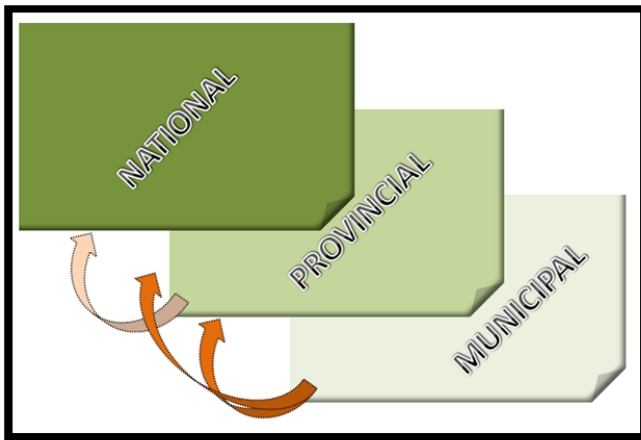


Figure 2: Coastal Management Programme Hierarchy

The provincial CMPs must be established to be consistent with the National CMP, and the municipal CMPs must be established to be consistent with both the Provincial and National CMPs (Celliers, et al. 2008).

Chapter 6, Part 7 titled “Coastal Planning Schemes” has reference. Section 56 (1) defines a Coastal Planning Scheme (CPS) as “a scheme that facilitates the attainment of coastal management objectives by:

- (a) defining areas within the coastal zone or coastal management area which may:
 - (i) be used exclusively or mainly for specified purposes or activities; or
 - (ii) not be used for specified purposes or activities; and
- (b) prohibiting or restricting activities or uses of areas that do not comply with the rules of the scheme.”

Section 56 (3) states that “A coastal planning scheme may be established and implemented for an area within the coastal zone by:

- (a) the Minister, after consultation with the MEC and with any authority that is responsible for managing an area to which the planning scheme applies, if the planning scheme applies to:
 - (i) an area of coastal public property and is established to protect and control the use of marine living resources or to implement national norms or standards...”

CMPs and CPSs appear to be useful tools in terms of reaching the objectives of the NEM: ICMA as defined in Section 2 of the Act¹³. The cornerstone of both these tools includes public participation in accordance with the principles of cooperative governance as set out in the NEMA¹⁴ (Celliers, et al. 2008).

Celliers, et al. (2008) summarise Section 53 (1) of the NEM: ICMA titled “Public participation” as “the public consultation process generally includes three steps viz. consultation with the appropriate government officials (generally the Minister, MEC or municipal official); reasonably accessible publication or broadcasting of intent, and finally, notification in the Government Gazette” (Celliers et al. 2008). The notice in the Government Gazette must provide sufficient information, in order for the public to submit written representations or objection to proposed actions within a period of 30 days (Celliers et al. 2008).

¹³Act No 24 of 2008, enacted on 1 December 2009.

¹⁴Act No. 107 of 1998 (as amended).

The success of CMPs and CPSs can be viewed from both a proactive/optimistic perspective or from a conservative / pessimistic perspective. This is qualified by the reality that development applications within PFHs have been met with significant opposition¹⁵ from Interested and/or Affected Parties (I&APs). Involving people in the design and implementation of policies and strategies for environmental management is crucial on both ethical and sustainability grounds (Furtado et al., 2000 cited in Holmes-Watts, 2008).

Each of the three case studies revealed 'ethical dilemmas' consistent with Fuggle & Rabie (2009), which states that "conflict furthermore arises from diverse needs and perspectives such as: anthropocentrism *versus* ecocentrism¹⁶, or protectionism *versus* quality of life sentiments." Quality of life sentiments have resonated consistently throughout the EIAs that were conducted for each of the case studies which contributes a cautionary optimistic 'thumbs up' to public engagement¹⁷ as required by the NEM: ICMA.

Owing to I&AP opposition as confirmed in the three case studies provided, one question needs to be asked: To what degree will development within PFHs be supported or impeded?

The NEM: ICMA does not specifically acknowledge PFHs as areas that are proclaimed for the purposes of fishing-related activities and relies on the MLRA, Section 27 (1) to establish a proclaimed 'fishing harbour'. The NEM: ICMA provides two tools to aid ICM, in the form of CMPs and CPSs, however history shows that public engagement is, for the most part, anti-development. Earlier in this paper it was alluded to that a government initiative, Fishing Harbours Transition Project, is currently underway to upgrade PFHs, however in light of the requirement in terms of Section 63 (1) of the NEM: ICMA, which calls for an EIA, public engagement may raise its head as the 'Achilles heel'.

Although this assertion may be viewed as nonsensical, it appears that in each of the case studies, the very essence for which a PFH was created is in many instances being controlled by the general public and surrounding residents as a consequence of the need to undertake an EIA.

Table 1 of this paper makes reference to 'Social Equity', a principle of the NEM: ICMA (as adapted from the NEMA principles), which reads as: "Coastal management efforts must ensure that all people, including future generations, enjoy the rights of human dignity, equality and freedom" (DEAT, 2000). It is submitted that this principle holds true for exposed coastlines viz. natural coastlines and not necessarily for PFHs.

Users within a PFH are protected to a large degree from storm surges and/or coastal processes such as tidal fluctuation. Upon review of the NEM: ICMA, it is evident that no cognisance of fishing harbour infrastructure has been taken into account, which means that any development within a PFH is subjected to the same legal process(s) as required for a fully-exposed development within a natural coastal system.

The effectiveness of these CMP and CPS tools will come into question with regard to their influence on development within PFHs. To date, no CMPs are available as the NEM: ICMA has only come into effect as of 1 December 2009 and a period of four years (Sections 44, 46, 48 of the NEM: ICMA) has been allowed for each respective level of government¹⁸ to compile a CMP (NEM: ICMA, 2008).

¹⁵Case Studies, namely Hout Bay (Bluefin Holdings, 2002/5), Gordon's Bay (ViakorSewe, 2004/5) and Struisbaai (Golden Falls Trading 193, 2006/10).

¹⁶Barrow, 2005 cited in Fuggle & Rabie, 2009.

¹⁷Note, this opinion is reserved within the context of developing within a PFH only.

¹⁸National, Provincial and Municipal.

The following table lists each of the effectiveness criteria and assesses the degree of NEM: ICMA effectiveness:

CRITERIA	DESCRIPTION	SUBJECTIVE OPINION	RATIONALE
Meta-evaluation	Relative success and utility of the NEM: ICMA as a legislated tool for managing the impact of proposals on the coastal environment	YES	Although in its infancy in terms of recorded cases, the legal framework appears to be consistent with international best practice as well as the South African Constitution and the principles of the NEMA. Section 63 (1) of the NEM: ICMA calls for an EIA which will add value to decision making for development within the coastal environment and, more specifically, within the CPZ.
Macro-evaluation	Effectiveness and performance of ICM systems established by particular countries or international agencies	YES	As stated above, the NEM: ICMA is aligned with international best practice and will go a long way to protecting development within the coastal environment. However, when considering development within harbours (in this case PFHs) the NEM: ICMA is not clear on how it will address development issues.
Micro-evaluation	Role and contribution of ICM approach and components to specific proposals, value added at specific stages	PARTIAL	<p>The NEM:ICMA is well structured and resonates consistently within the legal framework of South Africa. The value adding component however remains a point of contention with regard to development specifically within a PFH. The NEM: ICMA could have provided specific requirements for development within PFHs as they are by design considered a protected area as opposed to exposed natural coastlines. Value adding at specific stages is viewed as a critical factor in terms of the effectiveness and appropriateness of the NEM: ICMA . No distinction is provided in the NEM:ICMA to allow for streamlined development applications in this regard. It is a further concern since an EIA will, in most cases, be required.</p> <p>Public Participation will remain the central most significant issue in terms of development within a PFH.</p> <p>Much emphasis is placed on the CMP and CPS tools which, if compiled appropriately, may result in a beneficial effect on</p>

CRITERIA	DESCRIPTION	SUBJECTIVE OPINION	RATIONALE
			prospective development within a PFH. The issue of Public Participation needs to be controlled and the NEM: ICMA does not allow for a strictly regulated public engagement that meets the needs of development within PFHs.
Dimensional Effectiveness	At each level, the anatomy of the NEM: ICMA effectiveness can be dissected in relation to institutional, methodological and practical dimensions	YES	Upon review of the NEM: ICMA it seems apparent that well-structured responsibilities have been legislated, which includes cooperative governance from National, Provincial through to Municipal levels. Methodologically the NEM: ICMA provides for sound consideration of planning and natural environmental conditions, which will prove valuable for coastal development in general, especially for exposed coastlines. However, this seems to rely on the CMPs and CPSs for effectiveness in relation to PFHs.

Table 3: Assessment of the Effectiveness of the NEM: ICMA.
Adapted from Sadler, 2008.

CONCLUDING REMARKS

Glazewski (2005) states that there is a worldwide trend to promote the notion of integrated coastal management in coastal states. In order to achieve integrated coastal management it has been proposed by Cicin-Sain and Knecht (1998) that the following main functions are key: “**area planning, promotion of economic development, stewardship of resources, conflict resolution, protection of public safety and proprietorship of public submerged lands and waters**” (Cicin-Sain and Knecht, 1998 cited in Glazewski, 2005).

This paper focuses on a critical analysis of the NEM: ICMA as it relates to development within PFHs, and the highlighted text above reaffirms the three key issues that impact development within PFHs in the Western Cape.

The true challenge posed to development prospects within PFHs remains with the demarcation of the CPZ and the effectiveness of the CMPs and CPSs. In each of the case studies provided in this paper, development within a PFH was met with significant resistance from the public. The key point is that development is hampered within PFHs for the very reason they were created. The answer to the question of whether the NEM: ICMA has missed an opportunity to be effective and successful as it pertains to PFHs, is considered to rest with the application of the CMPs and CPSs.

Fuggle & Rabie (2009) make reference to the phenomenon that “prevailing management efforts are failing to mitigate the impacts of coastal population growth and development intensification”. This reality has spawned the creation of acts such as the NEM: ICMA and the paradigm shift to ICM have merit. However, the NEM: ICMA falls short of providing adequate insight to development within PFHs of the

Western Cape, which is considered to be a fatal flaw. This is further exacerbated by the current trend in South Africa to develop within the “urban edge” thus promoting densification. The result is a conflict between the need to develop within a PFH and the resistance from local residents, who do not support development that will affect the sense of place and heritage to which they have become accustomed.

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