

# Coos Bay Goal 16 Estuary Management Plan Assessment



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Final Report

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**Coos County Planning Department**

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## **About the Community Service Center**

The Community Service Center (CSC), a research center affiliated with the Department of Planning, Public Policy, and Management at the University of Oregon, is an interdisciplinary organization that assists Oregon communities by providing planning and technical assistance to help solve local challenges and improve the quality of life for Oregon residents. The role of the CSC is to link the skills, expertise, and innovation of higher education with the transportation, economic development, and environmental needs of communities and regions in the State of Oregon, thereby providing service to Oregon and learning opportunities to the students involved.

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# EXECUTIVE SUMMARY

This report presents a preliminary evaluation of the Coos Bay Estuary Management Plan (CBEMP). The evaluation is intended to inform a comprehensive review and update of the CBEMP that will begin in 2017. The preliminary evaluation focuses on areas where the legal framework might have changed, implications of any legal decisions that occurred since the plan was adopted in the 1980s, and a general evaluation of the usability of the plan.

## Background and Purpose

Oregon has a long legacy of land use planning. Starting with the passage of Senate Bill 100 in 1973, the state requires cities and counties to develop comprehensive plans and implementing ordinances. The statewide land use program includes elements specific to coastal communities, including Statewide Planning Goal 16: Estuarine Resources. The intent of Goal 16 is to recognize and protect the unique environmental, economic, and social values of estuaries and associated wetlands. Goal 16 requires affected local governments to develop comprehensive management programs to implement Goal 16.

The Coos County Planning Department is initiating a process to update the Coos Bay Estuary Management Plan (Volume II of the Coos County Comprehensive Plan). The Plan was initially developed, adopted, and acknowledged in the mid-1980s and has not had a comprehensive review since that time. As an initial step, Coos County and the South Slough National Estuarine Research Reserve (SSNERR) wanted a preliminary assessment of the plan against current land use laws, case law, and inventory data that has been gathered by the Partnership for Coastal Watersheds (PCW). This preliminary review is intended to inform a more detailed process to update the Coos Bay Estuary Management Plan. In short, the purpose of this technical review is to evaluate the CBEMP in terms of its legal framework, usability, and document structure in light of the upcoming update process.

## Recommendations

These recommendations for the CBEMP update process are drawn from the Community Service Center's review of the state and federal regulatory framework, evaluation of other estuary management plans, and stakeholder interviews. The list of interviewees and questions were developed jointly by the CSC, Jill Rolfe (Coos County), and Jenni Schmitt (South Slough National Estuarine Research Reserve), and other members of the Partnership for Coastal Watersheds (PCW).

Further context and explanation for the recommendations can be found in Chapter II through IV of this report.

### Legal Framework Recommendations:

While the current CBEMP plan is currently recognized by the state and thus in full legal compliance, there are significant opportunities to strengthen the legal context of the CBEMP by conducting GIS mapping, using simple and easy to understand

language for goals, policies, ordinances and criteria, and explicitly recognizing outside agency permits and review processes. More specifically CSC recommends:

- Cross reference allowed uses in each management unit with the underlying county or local zoning.
- Update the management units based on current zoning and land use demand
- Align management unit boundaries to tax lots, paying attention to ownership and zoning.
- Clearly distinguish between policies, ordinances, goals, and criteria.
- Clearly distinguish between management unit requirements and estuary-wide requirements.
- Review management unit geographic designations in light of current economic conditions and land uses.
- Consider suitability of developing and designating mitigation banks.

### **Usability Recommendations:**

The current CBEMP is organized within a legal compliance framework and there are significant opportunities to make the document easier for the general public and developers to read and understand.

- Consider developing a user guide to accompany the CBEMP that includes introductory remarks explaining section headings, a more robust definitions sections, and legal understanding.
  - Describe and diagram the path to all required permits for a development to be approved.
- Conduct digital GIS based mapping of land cover and land uses.
  - Create maps at a scale that is suitable to guide development siting within management units.
  - Include mapping of natural resources and areas of cultural significance.
- Acknowledge the outside agencies, regulations, and types of permitting process that exist in addition to the CBEMP regulations and permit.
- Although Policy 18 is very specific on how to incorporate comments from the tribes it should be reviewed since there are conflicts with Statutory timelines.
- Review existing practice for mapping of natural resources and areas of cultural significance. Currently the County relies upon the Coquille Indian Tribe and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians to map natural resources areas of cultural significance. Development options need to consider potential impacts upon these areas.
- Use simple language to avoid misunderstandings and to make the plan more accessible to the average user.

### **Document Structure Recommendations:**

The current CBEMP is a lengthy and unwieldy document to navigate and there are significant opportunities to use digital formatting and hyperlinks to improve the document structure.

- Digitize and hyperlink the CBEMP.
- Consider formatting for a web accessible document as opposed to a traditional written report.
- Include a glossary of terms.
- Use clear headers to explain the purpose and need for document sections.
- Cross-reference plan policies and regulations both in text and with tables or matrices (consider the use of a separate policy volume).
- Make more explicit the document hierarchy of policies, ordinances, goals, and criteria.

# CHAPTER I: INTRODUCTION

This report presents a preliminary evaluation of the Coos Bay Estuary Management Plan (CBEMP). The evaluation is intended to inform a comprehensive review and update of the CBEMP that will begin in 2017. The preliminary evaluation focuses on areas where the legal framework might have changed, implications of any legal decisions that occurred since the plan was adopted in the 1980s, and a general evaluation of the usability of the plan.

## Background

Oregon has a long legacy of land use planning. Starting with the passage of Senate Bill 100 in 1973, the state requires cities and counties to develop comprehensive plans and implementing ordinances. The statewide land use program includes elements specific to coastal communities, including Statewide Planning Goal 16: Estuarine Resources. Statewide Planning Goal 16 (Estuarine Resources) provides guidance to local governments that have estuaries within their jurisdiction. The goal is specific about the intent:

*To recognize and protect the unique environmental, economic, and social values of each estuary and associated wetlands; and to protect, maintain, where appropriate develop, and where appropriate restore the long-term environmental, economic, and social values, diversity and benefits of Oregon's estuaries.<sup>1</sup>*

The Coos Bay Estuary is recognized as a “Deep-Draft Development Estuary” under Oregon’s Administrative Rule Classifying Oregon Estuaries (OAR 660-17)<sup>2</sup> and under the requirements of Goal 16, Estuary Management Plans must contain the following elements: factual base, management unit designation maps, dredged material disposal plans, mitigation and restoration plans, and policies for uses and activities.

To comply with Goal 16, Coos County developed the Coos Bay Estuary Management Plan (CBEMP), Volume II of the Coos County Comprehensive Plan. The CBEMP was developed, adopted, and acknowledged in 1984. Since acknowledgement, the County has not conducted a comprehensive review of the CBEMP. The Coos County Planning Department is currently initiating a process to update the CBEMP. Coos County and the South Slough National Estuarine Research Reserve (SSNERR) will initiate a comprehensive review and update of the CBEMP starting in early 2017. As an initial step, the agencies partnered with the University of Oregon’s Community Service Center (CSC) to conduct a preliminary assessment of the CBEMP.

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<sup>1</sup> Guidelines GOAL 16: ESTUARINE RESOURCES OAR 660-015-0010(1). Oregon’s Statewide Planning Goals & Guidelines. <https://www.oregon.gov/LCD/docs/goals/goal16.pdf>

<sup>2</sup> Oregon Administrative Rule Classifying Oregon Estuaries OAR 660-17. [http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_660/660\\_017.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_017.html)



## Purpose and Methods

The CBEMP is in three volumes and is over 1,000 pages in length. This preliminary review is not intended to be comprehensive; our approach focused on the following elements:

1. *Land Use Inventory.* What work needs to be completed on the inventory to bring it into compliance and to inform policies related to the plan?
2. *Legal Compliance.* What changes have occurred to applicable federal and state regulations? Do the changes require amendments to the plan? Are the plan policies compliant with current legal requirements? Do the policies achieve the County's objectives with respect to management of the estuary?
3. *Administrative Review.* The purpose of any plan is to provide a framework for review of land use activities in the planning area. This part of the review assesses how the plan is implemented via local regulations and intended to identify gaps or areas where the local regulations lack clarity or are inefficient.

As a first step, the CSC first reviewed the Oregon Department of Land Conservation and Development's (DLCD) [Assessment of Oregon's Regulatory Framework for Managing Estuaries](#). Next, we conducted a review of estuary management plans within Oregon to identify best practices, innovative approaches, and challenges experienced by other local governments in their estuary management programs. To supplement the document review, CSC conducted interviews with a diverse range of participants representing the environmental, socio-cultural, and economic perspectives to deepen our understanding of the estuarine management planning framework and generate recommendations for the CBEMP update process.

### Oregon's Regulatory Framework for Managing Estuaries

The *Assessment of Oregon's Regulatory Framework for Managing Estuaries*<sup>3</sup> was a result of a multi-year effort by DLCD to facilitate the modernization of local estuary management plans. The resulting report is a qualitative assessment of Oregon's current estuary regulatory and management system. The report identifies the primary challenges facing the estuary regulatory system and offers recommendations to address these challenges.

Chapter 2 of this report applies the Assessment's findings and recommendations to the CBEMP plan and its update process.

### Oregon Estuary Management Plan Review

CSC reviewed seven estuary management plans in Oregon to identify best practices in terms of legal framework, usability, and document structure that might be applied to the CBEMP update process. The length and age of these plans made extracting best practices and recommendations a significant challenge, but the plan

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<sup>3</sup> Assessment of Oregon's Regulatory Framework for Managing Estuaries. (2014). Oregon Department of Land Conservation. <https://www.oregon.gov/LCD/OCMP/docs/Publications/RegulatoryAssessment.pdf>

review yielded some useful information. Brief case studies of each of these estuary management plans can be found in Appendix A of this report.

**Table 1: Oregon Estuary Management Plans**

Plan Name	Initial Adoption	Most Recent Update
<a href="#">Curry County Estuarine Resources Chapter</a>	1979	1995
<a href="#">Coos Bay Estuary Management Plan</a>	1984	None
<a href="#">Coastal Resources Plan for Douglas County</a>	1983	2014
<a href="#">Lane County Rural Comprehensive Plan Policies: Coastal Resources Management Plan</a>	1980	2006
<a href="#">Lincoln County Estuary Management Plan</a>	1982	None
<a href="#">Tillamook County Goal 16: Estuarine Resources Element</a>	1982	None
<a href="#">Clatsop County Goal 16 &amp; 17 Element: Columbia River Estuary</a>	1979	1990

## Stakeholder Interviews

CSC conducted 10 stakeholder interviews to supplement our research. Jill Rolfe (Coos County), Jenni Schmitt (South Slough National Estuarine Research Reserve) and members of the Partnership for Coastal Watersheds (PCW) selected individuals for interviews. The interviewees represent a range of environmental, socio-cultural, and economic perspectives as they relate to the Coos Bay Estuary. The group focused on identifying individuals who are familiar with the CBEMP in their professional capacity. The goal of these interviews was to validate the inventory of existing legal requirements and to identify attitudes, perceptions, concerns, and opportunities related to the existing Estuary Management Plan.

The full interview script developed by the CSC in coordination with the Coos County Planning Department and members of the PCW is included in Appendix B of this report. The following table contains the list of interviewed key stakeholders, their organizations, and their positions.

**Table 2: Stakeholder Interviewees**

<b>Name</b>	<b>Organization, Title</b>
Andrew Stamp	Coos County Hearings Officer and Land Use Attorney
Bob Braddock	Jordan Cove Energy Partners, Vice President & Project Manager
Brianna Hanson	Oregon International Port of Coos Bay, Treasurer
Chris Claire	Department of Fish and Wildlife, Habitat Protection Biologist
Chris Hood	Stuntzner Engineering and Forestry, Planning Department Head
Connie Stopher	South Coast Development Corporation, Executive Director
Courtney Johnson	Crag Law Center, Staff Attorney
Debbie Erler	City of Coos Bay Planning Department, Planner 1
Jill Rolfe	Coos County, Planning Director
Kassandra Rippee	Coquille Indian Tribe, Historic Preservation Officer & Archaeologist

## Organization of Report

The rest of this report is organized around the three research themes: (1) legal framework; (2) usability; and (3) document structure. An overview of what was broadly identified as challenges and opportunities surrounding the CBEMP update process is presented in Chapter 2. Chapters 3 through 5 provide a more in-depth consideration of each of the three research themes (legal framework, usability, and document structure). Chapter 6 contains our recommendations for the CBEMP update process.

## CHAPTER II: CHALLENGES AND OPPORTUNITIES

The Department of Land Conservation and Development (DLCD), as the agency charged with implementing and enforcing the statewide land use program, and as a participating agency in the Oregon Coastal Zone Management Association (OCZMA), has a significant interest in the success and effectiveness of local estuary management programs. Modernization of estuary management plans across Oregon is a need recognized by DLCD.

In 2014 DLCD completed an *Assessment of Oregon's Regulatory Framework for Managing Estuaries* to help facilitate updates of estuary management plans.<sup>4</sup> The assessment found the following opportunities for improvement of estuary management plans:

- Plans do not incorporate updated digital mapping and resource technology.
- An overall lack of awareness and understanding of the role these plans play in the land use decision-making process that reduces the effectiveness of the plans.
- Changing market and economic conditions have led to the need for highly detailed plans to be updated at a scale and frequency beyond the capacity of local governments.
- Many plans either duplicate or contradict state and federal regulatory processes, which places undue technical burdens on local governments when enforcing Plan policies.
- The Oregon system presumes a level of local government resource capacity (staff and resources) that does not, for the most part, exist. As a result, the capacity to administer and maintain plans is constrained.

To address each of these challenges the assessment outlines five recommendations to be fulfilled by the Department of Land Conservation and Development:

1. Assist local governments in incorporating up to date digital habitat classification maps into local estuary management plans.
2. Develop guidance for and provide direct technical assistance to local governments for evaluating/auditing local estuary management plans to identify priority areas for plan updates.
3. Develop and implement estuary planning related outreach, education and training efforts directed to stakeholders and decision makers involved in

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<sup>4</sup> Assessment of Oregon's Regulatory Framework for Managing Estuaries. (2014). Oregon Department of Land Conservation. <https://www.oregon.gov/LCD/OCMP/docs/Publications/RegulatoryAssessment.pdf>

estuary management. In particular, efforts should focus on local government planning staff and state and federal resource agency staff.

4. Convene a technical work group to evaluate in detail the coordination between estuary management plan implementation and the Joint DSL/ Corps permit process. This work should focus on opportunities for improved integration of local plans with other regulatory processes.
5. Develop guidance and provide direct technical assistance to local governments for updating city/county planning coordination agreements to specifically address estuary management plan implementation, maintenance, and update responsibilities.

The assessment suggests an intent by DLCD to be an active partner in future estuary management plan updates. Support and guidance from the DLCD should be sought as the update process proceeds, particularly in regard to conducting outreach and integrating the land use inventory. In addition, DLCD can provide support with the legal and regulatory aspect of estuary management in Oregon.

## **Challenges and Opportunities**

The PCW identified three primary perspectives from which to discuss challenges and opportunities that exist within the Coos Bay Estuary: environmental, socio-cultural, and economic. The CSC reviewed the CBEMP, other estuary management plans, and conducted interviews with key stakeholders to identify major challenges and opportunities.

### **Natural Resource**

The CBEMP does not reflect the significant changes in the understanding of estuary environmental functions and services that have occurred since the CBEMP was written. In addition, the CBEMP does not reflect changes to land cover and habitat that are now available with improved mapping and data inventories. As a result of the disconnect between the existing knowledge of estuary environmental functions and data the allowed uses within management units may not align with the current land cover and habitat. There is now an opportunity to refine the management units and allowed uses to better align with existing conditions.

### **Socio-cultural**

The demographic characteristics of the Coos Bay area have changed since the CBEMP was adopted in the 1980s. As such, current community values and beliefs about how the Coos Bay Estuary should be managed may not be accurately reflected in the CBEMP. With the changing socio-cultural landscape, there is a need to engage additional stakeholders in the planning process to instill existing values within the estuary management plan. There is also an opportunity to develop a structure that allows a wider range of users to easily understand and navigate the plan.

## **Economy**

According to the stakeholders that the CSC interviewed the economy of the greater Coos Bay region has undergone dramatic changes in the past 30 years. A shift from a predominately natural resource dependent economy to a more diversified and varied economy that includes tourism and services has occurred. The type and scale of development that was planned for when the CBEMP was created does not match the economic reality of the current time. The management units, allowed uses, and potential development sites of the CBEMP need to be updated to reflect the current economic opportunities.

To better understand current economic opportunities Coos County should review each jurisdictions' Economic Opportunities Analysis (EOA) and the Comprehensive Economic Development Strategy (2014-2018).

## CHAPTER III: LEGAL FRAMEWORK

Oregon's Statewide Planning Goal 16 (Estuarine Resources) establishes legal requirements for estuary management plans. Because the CBEMP is formally acknowledged by the state it was deemed in full legal compliance with applicable statewide planning goals and administrative rules that existed in 1984. Per ORS 197.646(3) any plan that is out of compliance with state law must directly apply relevant state provisions to local land use decisions. While there are no changes in state planning requirements or case law that need to be addressed in an update of the CBEMP there are opportunities to clarify the existing network of state and federal requirements.

Although the CBEMP is part of a larger framework of state and federal permitting processes required for a development project to break ground, these outside agencies and processes are not currently recognized or acknowledged within the plan. The fact that the CBEMP does not recognize other state and federal permitting requirements and processes does not directly conflict with outside permitting processes, a separate CBEMP permitting process that does not recognize other permits the overall permitting/entitlement process confusing and challenging to understand.

In broad terms, the CBEMP describes what landowners can do in the estuary. Other state and federal permits tell landowners own what they cannot do. While this does present a hurdle to incorporating project-specific outside permitting processes into the CBEMP, there is still room for significant improvements. Stakeholders interviewed indicated that confusion surrounding the timeline and order of permit applications between the CBEMP and outside regulatory agencies places a time and cost burden on potential developers. This burden is large enough that it may be considered a barrier to economic development in the estuary.

### State Level Regulations

The following are common Oregon State permits and regulations that may be required for projects within the Coos Bay Estuary that are not acknowledged or included in the current CBEMP.

- Department of State Lands (DSL) Removal and Fill permits (ORS 196.795-990).<sup>5</sup>
- Department of Fish and Wildlife (ODFW) hunting, fishing, and fish hatchery regulations.
- Department of Environmental Quality (DEQ) point and nonpoint source water quality regulations and permits. Point source regulations are generally outlined in Oregon Administrative Rules Chapter 340.<sup>6</sup> Nonpoint

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<sup>5</sup> Removal-Fill Permits: <http://www.oregon.gov/DSL/WW/Pages/Permits.aspx>

<sup>6</sup> OAR Chapter 340: [http://arcweb.sos.state.or.us/pages/rules/oars\\_300/oar\\_340/340\\_tofc.html](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_tofc.html)

strategies are managed through the state “Total Maximum Daily Load” (TMDL) standards.<sup>7</sup>

- Department of Agriculture (ODA) aquaculture regulations and permits.

## **Federal Level Regulations**

The following are common Federal permits and regulations that may be required for projects within the Coos Bay Estuary that are not acknowledged or included in the current CBEMP.

- Army Corps of Engineers (USACE) jetty and ship channel regulations.
- Fish and Wildlife Service (FWS) environmental regulations and permits.
- National Marine Fisheries Services (NMFS) ocean fisheries and anadromous fish regulations.
- Environmental Protection Agency (EPA) Clean Water Act and Endangered Species Act regulations.

## **Stakeholder Interview Findings**

The following are key findings concerning the legal framework of the CBEMP that were synthesized from the CSC stakeholder interviews:

- Considerable time and effort is being expended to align mapping and land use issues on a case by case basis.
- The language used in the CBEMP control policies can be vague and ambiguous leading to legal conflicts over intent and over whether a project falls within an allowed use or not.
- The size and number of individual management units reflect outdated land uses, scale of development, and environmental impacts.
- Current projects that cross over multiple management units incur significant increases in cost, time, and effort in a complex, multi-tiered permitting process.
- Federal agencies, permitting, requirements, and processes are not directly recognized or acknowledged within the plan leading to confusion regarding the connection of state and federal permitting. Stakeholders interviewed indicated that confusion surrounding the timeline and order of permit applications between the CBEMP and outside regulatory agencies places a time and cost burden on potential developers. This burden is large enough that it may be considered a barrier to economic development in the estuary.

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<sup>7</sup> Total Maximum Daily Loads: <http://www.oregon.gov/deq/wq/tmdls/Pages/default.aspx>



## Case Study Best Practices

The Curry County Estuarine Resources Chapter goes above and beyond the legal requirements of the State Coastal Management Program by including non-classified estuaries and rivers that go beyond the geographic boundary required under the goal. Including additional resources (minor estuaries) that extend beyond the estuary boundary strengthens the environmental protections and can prevent later legal issues during a development proposal.

The Clatsop County Comprehensive Plan Goal 16 & 17 Element: Columbia River Estuary includes a Cumulative Impact Analysis. This section outlines the importance of protecting, maintaining, and managing the Columbia River Estuary. This section includes analysis of the economic, social, and environmental benefits of natural resources. The CBEMP includes a cumulative impacts statement at the end of Volume II, Part 3: Linkage and Goal Exceptions. Explicitly incorporating this into Part 1 of the CBEMP would make this information easier to access and more likely to guide decision making.

## CHAPTER IV: PLAN USABILITY

The CBEMP is a large document that is contained within three volumes and is over 1,000 pages in length. While the sheer length and content of the plan creates usability issues, the length itself is not as critical an issue as is the ability to navigate through the volumes. The CBEMP is organized from a legal compliance framework as opposed to a project permitting framework. While this framework presumably made it easier to determine compliance with Goal 16 and other applicable policies, it is not very accessible from the end user perspective. Finally, the legal jargon, undefined terminology, and verbose writing makes the document challenging to use as a landowner, developer, or member of the general public.

### Stakeholder Interview Findings

Following are key findings concerning the usability of the CBEMP that the CSC synthesized from the stakeholder interviews:

- The CBEMP is currently organized from a legal compliance framework as opposed to a project permitting framework. This organization combined with legal and ambiguous terminology makes the document challenging to use.
- Although the CBEMP is part of a larger framework of state and federal permitting and review processes, these outside agencies and processes are not clearly acknowledged nor are they described in the CBEMP.
- Confusion exists surrounding the timeline and order of CBEMP and other regulatory agency permit applications between the placing a time and cost burden on developers.
- It is challenging for many users to distinguish between policies, ordinances, goals, and criteria within the CBEMP.

### Case Study Best Practices

The Introduction of the Lincoln County Estuary Management Plan is likely the most organized and best formatted of all such plans in Oregon. It includes a thorough description of each of the section headings in the remainder of the document. Additionally, the Introduction includes a helpful section titled “Content and Use of the Document” which describes how the reader should use the document and why it exists. Including a comparable section in the updated CBEMP would improve the usability of the plan.

The Curry County Estuarine Resources Chapter includes 17 Countywide policies that are separated into those that address the estuaries themselves and those that address the estuarine shorelands. Separating policies into useful categories such as shoreland and non-shoreland in the updated CBEMP can improve the document’s usability.

## CHAPTER V: DOCUMENT STRUCTURE

It is widely recognized that the CBEMP document structure is a significant barrier to the use and understanding of the document. The document was developed before the widespread use of word processors which greatly enhanced formatting options. This is largely due to the scanned format, overall length, lack of useful headings, and confusing organization of the current document.

### Stakeholder Interview Findings

The following are key findings concerning the usability of the CBEMP that were synthesized from the CSC stakeholder interviews:

- Stakeholders were in unanimous agreement that the CBEMP is a challenging document to use due to its scanned format, overall length, and lack of useful structure.
- Stakeholders did not feel that there were significant sections of the document that could be removed or condensed, but they did feel strongly that the overall length of document requires stronger formatting and cross referencing.
- Document users can be confused as to why certain document sections are included, however, being explicit about what content is required to comply with Statewide Planning Goals 16 and 17 could improve the indexing of the Plan.
- The document structure makes it challenging to determine which control policies apply to the entire estuary and which pertain to specific management units without reading the entire document. Cross-referencing control policies at the management unit level would assist landowners and developers in properly identifying all policies that apply to a certain geography.

### Case Study Best Practices

The lack of recent meaningful updates to estuary management plans in Oregon has led to the current situation in which there are no estuary management plans that the CSC found to have exemplar or recommendable document structure beyond the digitization of plan text. The length of estuary management plans is highly variable and dependent on the number of estuaries included, the size of the estuary, and the type of the estuary.

## CHAPTER VI: CONCLUSIONS AND RECOMMENDATIONS

CSC developed a toolbox of recommendations for the CBEMP which we categorize by the three main categories of this assessment; legal framework, usability, and document structure. These recommendations reflect opinions and suggestions expressed by stakeholders to the CSC during the interview process. The CSC compiled, summarized, and organized these recommendations but did not change or validate the information gathered from the interviews.

### Legal Framework

- Cross reference allowed uses in each management unit with the underlying county or local zoning.
- Update the management units based on current zoning and land use demand
- Align management unit boundaries to tax lots, paying attention to ownership and zoning.
- Clearly distinguish between policies, ordinances, goals, and criteria.
- Clearly distinguish between management unit requirements and estuary-wide requirements.
- Review management unit geographic designations in light of current economic conditions and land uses.
- Consider suitability of developing and designating mitigation banks.

### Usability

- Consider developing a user guide to accompany the CBEMP that includes introductory remarks explaining section headings, a more robust definitions sections, and legal understanding.
  - Describe and diagram the path to all required permits for a development to be approved.
- Conduct digital GIS based mapping of land cover and land uses.
  - Create maps at a scale that is suitable to guide development siting within management units.
  - Include mapping of natural resources and areas of cultural significance.
- Acknowledge the outside agencies, regulations, and types of permitting process that exist in addition to the CBEMP regulations and permit.
- Although Policy 18 is very specific on how to incorporate comments from the tribes it should be reviewed since there are conflicts with Statutory timelines.
- Review existing practice for mapping of natural resources and areas of cultural significance. Currently the County relies upon the Coquille Indian Tribe and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians to map natural resources areas of cultural significance. Development options need to consider potential impacts upon these areas.

- Use simple language to avoid misunderstandings and to make the plan more accessible to the average user.

## **Document Structure**

- Digitize and hyperlink the CBEMP.
- Consider formatting for a web accessible document as opposed to a traditional written report.
- Include a glossary of terms.
- Use clear headers to explain the purpose and need for document sections.
- Cross-reference plan policies and regulations both in text and with tables or matrices (consider the use of a separate policy volume).
- Make more explicit the document hierarchy of policies, ordinances, goals, and criteria.

## **Conclusion**

There is a demonstrated need for the CBEMP plan to undergo an update process. The document has not been significantly updated since its creation in 1984 and there have been significant changes in the physical environment, outside legal processes, local economy, scientific understanding of estuary functions and processes, and community values.

While many of these changes will be the result of significant public outreach and will involve the PCW and its informational products, the overall document's legal framework, usability, and structure should also remain important considerations as they have significant impacts on how the resulting CBEMP will be interpreted and utilized within the community. Improving the legal framework, usability, and document structure can lead to a CBEMP that is easier for users to understand by providing clear environmental protections that reflect the current socio-cultural values of the community while allowing for smart economic development and growth.

# APPENDIX A: OREGON ESTUARY MANAGEMENT PLAN SUMMARIES

## Clatsop County Goal 16 and 17 Element: Columbia River Estuary

### Overview

First adopted in June 1979. Most recently amended on December 21, 1990. The Columbia River Estuary is divided into 46 planning subareas that are drawn to represent distinct planning units with common features and needs. This planning process was prepared by the Columbia River Estuary Study Taskforce (CREST) a collection of cities, counties, and port districts that extends into the State of Washington. In 1987 the plan update process began as a result of continually changing state and federal regulation and programs.

### Document Framework

1. Introduction and Background
2. Cumulative Impacts
3. Columbia River Estuary Shoreland and Aquatic Regional Policies
4. Intergovernmental Coordination Policies
5. Columbia River Estuary Subarea Plans
6. Mitigation and Restoration Plan for the Columbia River Estuary
7. Appendices

### Findings

The Clatsop County EMP's strength is the outline of its policies. Once a reader identifies the location of a policy in question, the document offers a small background section as rationale for each policy. Following the background section, the document lists any specific policy information in a clear and concise manner. These policies are bolstered by cross-referencing other relevant Plan Sections throughout the document that readers can use to get further clarification.

Another strength of this plan is the inclusion of the Cumulative Impact Analysis. This section outlines the importance of protecting, maintaining, and managing the Columbia River Estuary. This section includes analysis of the economic, social, and environmental benefits of the natural resource.

As far as readability and user-friendliness, the plan is formatted poorly. It is easy to get lost in the document due to the large blocks of texts without proper indentation or style structure. Additionally, the heading and section headers listed in the Document Framework require that the reader have at least some prior background of the local government estuary process. Also, the Coos County Plan includes a section describing the public involvement process that is missing from the Clatsop County Plan.

# **Tillamook County Goal 16: Estuarine Resources Element**

## **Overview**

Originally adopted in 1982, the plan has not been updated since. The Tillamook County Goal 16: Estuarine Resources Element is a chapter within the County's larger Comprehensive Plan.

## **Document Framework**

1. Overview of Estuary Plan
2. Estuary Management Unit Designation Maps
3. Dredged Material Disposal Plan Element
4. Restoration and Mitigation Plan Element
5. General Policies for Estuaries
6. Policies for Estuaries Uses
7. Policies for Estuary Activity
8. Implementation Policies
9. Appendix

## **Findings**

Like all chapters in the Tillamook County Comprehensive Plan, Goal 16 follows an easy to follow section style structure. The indentation of each subsequent section allows the reader to easily understand where they are within each section of the document. Additionally, the large blocks of text are broken into manageable sections by the use of charts and graphics.

The Document Framework is separated into each of the major required elements of Estuary Management Plan: Maps, Dredged Material Disposal, Restoration and Mitigation, and Policies. This makes it easy for the reader to locate exactly what they are searching for. The document also includes a table of contents for all maps within the chapter.

The policy sections of this document are easy to follow and find. Each section categorizes general policies and includes additional, or specific, policies within each of these categories. This helps decision makers easily identify the policies related to agriculture, marinas, mining and mineral extraction, or any other activity taking place along the estuary.

A weakness of this document is its length. Policies related to estuaries are not mentioned until page 276. While this shows the thoroughness of the document, it forces readers to wade through hundreds of pages before they get to rules guiding development in Tillamook County.

# Lincoln County Estuary Management Plan

## Overview

Originally adopted in September 1982, the plan has not been updated since. Lincoln County is home to the Yaquina Bay Estuary one of the three major estuaries on the Oregon Coast. The EMP is a standalone document that has been attached to the County's Comprehensive Plan.

## Document Framework

1. Introduction
2. Overall Management Policies
3. Sub-Area Policies
4. Management Classifications & Permitted Use Definitions
5. Estuarine Use Standards
6. Management Units/Permitted Use Matrix
7. Mitigation and Restoration
8. Log Storage and Transportation
9. Future Development Sites
10. Plan Implementation
11. Appendix

## Findings

The Introduction of the Lincoln County EMP is likely the most comprehensive of all plans reviewed in this memorandum. It includes a thorough description of each of the section headings in the remainder of the document. Additionally, the Introduction includes a helpful section titled "Content and Use of the Document" which describes how the reader should use the document and why it exists.

Similar to the Lane County structure, each of the policy sections only provides a list of policies with no supporting background information. While this shortens the document for better readability it puts some background research on the shoulders of the reader.

Another strength of this document is the inclusion of sections dedicated to the Management Unit/Permitted Use Matrix, Log Storage and Transportation, and Future Development Sites. These three sections are helpful to staff, stakeholders, and citizens when making decisions on development within the estuary area. The Management Unit/Permitted Use Matrix makes it easy to understand what development is permitted and where, it's clear that this can be a valuable resource to city leaders. A drawback of these sections, specifically the Future Development Sites section, however, is the need to constantly keep them up to date based on development trends, new technologies, and changing regulations.

The major weakness of this EMP is that its age and lack of scientific findings that make it functionally weak.



# Lane County Rural Comprehensive Plan Coastal Resources Management Plan

## Overview

The Coastal Resources Management Plan (CRMP) was adopted as a Special Purpose Plan as a component of the Rural Comprehensive Plan in June 1980. The CRMP has since been amended in 1982, 1983, 1991, and most recently in 2006. The Lane County CRMP is a part of the larger General Plan Policies document.

## Document Framework

The General Plan Policies document is structured into three parts. Part 1 is Introductory Material, Part 2 is Plan Policies related to each of the first 15 Statewide Planning Goals, and Part 3 is the Coastal Resources Management Plan Policies. Part 3 is broken into the following sections:

1. Goal 16: Estuarine Resource
2. Goal 17: Coastal Shorelands
3. Goal 18: Beaches and Dunes
4. Goal 19: Ocean Resources

## Findings

The Lane County General Plan Policies document is a very simplified and straightforward document. There is minimal explanation the sections and any background information for Part 2 and 3 of the document is included in Part 1. The document follows a strict structure of listing the Statewide Planning Goal and the policies related to that goal. While this makes it easy to follow from the reader's perspective, there is no explanation of the policies and why they are included. The document has also been updated in a piecemeal fashion so fonts, formatting, and style structure vary by section, making it difficult to follow.

The CRMP, as with the rest of the document, is separated into Statewide Planning Goals. Goal 16: Estuarine Resources is further split into Natural, Conservation, and Development sections. It is difficult to discern the distinct required elements of the Management Plan such as the factual base and the dredging management and disposal plan. These sections are buried throughout the document.

In an effort to keep the document brief and concise, the Plan references outside documents and plan that readers can review for more information. There are many instances where policies read "[policy language], as authorized in the Siuslaw River Dredge Material Disposal Plan." This gives the reader no clear indication of what the policy is actually referencing or where to find the additional information needed.

An underlying strength of this document however, is its brevity. If a reader needs specific policy language, they do not have to search through hundreds of pages of irrelevant information. Additionally, the headings within the Goal 16 element make it easier to find policies that are related to Natural estuaries, Conservation, and Development.

# Coastal Resources Plan for Douglas County

## Overview

Originally adopted December 14, 1983. Most recently revised on November 30, 2014. This plan is a combination of both Goal 16 and 17 elements of the larger County Comprehensive Plan. In 2013, a grant was awarded to the County from the Department of Land Conservation and Development to update the entirety of the document and to digitize the maps contained in each element of the plan into the county's GIS database.

## Document Framework

1. Introduction
2. Estuarine Resources
3. Coastal Shorelands
4. Dredged Material Disposal
5. Restoration and Mitigation
6. Beaches and Dunes
7. Appendix

## Findings

Because this document has been fully updated and revised within the past five years, it has a high-level of readability. The Coastal Resources Plan is formulated in a way that makes it a standalone document. It provides enough background to help the reader understand its purpose without needing to read the Comprehensive Plan.

The Document Framework provides a clear indication of where a reader may find the information for which they are searching. The Estuarine Resources element is broken into sections that make logical sense to the reader and naturally progresses through background information, regulatory requirements, and County estuary policies. The style structure is easy to follow and the reader can easily follow the flow of the document. Throughout the document there are high quality, color maps showing the boundaries of each management unit and other important geographic features.

Another strength of this document is the separation of the Dredged Material Disposal and Restoration and Mitigation as their own elements of the plan. Many Management Plans Place these section within other section headings, which makes them more difficult to find. Additionally, by placing the Definitions section in the Appendix, the document doesn't get cluttered additional pages; instead readers can reference the Appendix as needed.

A potential weakness of this document is that it is significantly shorter than other county Estuary Management Plans but also includes an element related to Coastal Shorelands. There may be concern that the document oversimplifies the findings, inventory, and policy sections of the Plan. Potentially leaving out information that may be necessary for developers, citizens, and staff to know when making future decisions.

# Curry County Estuarine Resources Chapter

## Overview

Curry County's Estuary Management Plan is incorporated as the Goal 16 chapter of their local Comprehensive Plan. Most recently updated in 1995, the plan includes the Natural estuaries of Sixes, Elk, and Pistol Rivers, the conservation estuary of the Winchuck River, and includes the Rogue and Chetco Rivers as shallow-draft estuaries. The geography of Curry County allows for many smaller estuaries with less tidal influx than other counties. However, the Rogue and Chetco Rivers are considered major estuarine environments.

## Document Framework

1. Introduction
2. Estuarine Resources Goal Requirements
3. Rogue Estuary
4. Chetco Estuary
5. Minor Estuaries
6. Estuary Management Designations
7. Estuary Plan Implementation
8. Countywide Estuarine Resources Goals and Policies

## Findings

The Curry County Comprehensive Plan is a difficult one to read. All amendments that have been adopted into the plan are included at the beginning of the document with the original Plan text included near the end. The reader can easily get lost and have to flip between pages of amendments and original text in order to read the document in a cohesive manner.

Related to readability, the Curry County EMP is one that has a good document framework and structure. It is especially helpful that the document separates out the major estuaries from the minor ones in their own sections. Each estuary receives the same section framework including an introduction, a technical inventory of the unique natural and development characteristics, and a specific management plan related to mitigation and restoration of the estuary.

The Curry County Plan is thorough in that there are estuaries and natural river flows included that are not required by the State Coastal Management Program. This shows that the inventory of estuaries in Curry County is an in-depth analysis and characteristics of each tidal influx best represents what is happening throughout the County.

The 17 Countywide policies outlined in the Plan are separated into those that address the estuaries themselves and those that address the estuarine shorelands. These policies are laid out in a matter-of-fact manner with no introduction or further description of the context. This requires the reader to have previous knowledge of technical and complex estuary policy in the State of Oregon and would not be easily understood by the general public.

# APPENDIX B: INTERVIEW SCRIPT

The following are the main questions to be used during the CSC interviews.

## Main Questions

- In what context have you used the Coos Bay Estuary Management Plan (CBEMP) in your work?
- In your view does the CBEMP strike an appropriate balance between resource protection and private property rights? Explain.
- Have you encountered barriers or issues due to the plan? If so, explain.
- What suggestions do you have for improving the plan? What areas should the county focus on?

## Optional Questions

The following stakeholder questions have been categorized to ensure that they address the information most valuable to an EMP update in Coos County. The questions below may be asked of some stakeholders depending on their answers to the main questions identified above, however, the main questions listed above should provide the responses we are looking to receive without the need to answer ask the questions below.

### Legal Framework

Purpose: Determine how well the CBEMP meets federal and state regulations. Identify how well the plan/ policies enhance management of the estuary. These questions may be asked to an individual more familiar with the legal/ regulatory requirements (attorneys, Coastal Management Program staff, etc.).

- Do you feel that there are legal shortcomings with the current CBEMP?
- Have there been significant changes to federal regulations since 1980 that are not reflected in the existing CBEMP?
- How well do the procedural uses of the current EMP meet legal requirements?

### Usability

Purpose: Determine how the document is used and for what purposes. These questions may be asked to individuals that have familiarity with multiple Estuary Management Plans (EMPs).

- Which EMPs do you most utilize?
- Are there EMPs that are particularly useful? Explain.
- What other resources are used for estuary management and planning decisions?

## **Document Structure**

Purpose: Determine the accessibility of the document and the appropriateness of the length, depth of content.

- Do you find the organization of the CBEMP to be useful?
- What suggestions would you have to better structure the CBEMP?
- Are there redundant/unnecessary sections or content that could be removed to make the CBEMP more concise and useful?