

Developing and Adopting Water Resource Policy

A Comparative Analysis of the Multi-City/County Water Resources Project Policy Development Processes



Prepared by:



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1.0 Background and Context

Protecting natural, and specifically water, resources is a challenge for Oregon as rural areas grow and develop. At the same time, local governments are generally unprepared for the complexities surrounding critical water resource protection.

This report summarizes and evaluates the process and lessons learned through a unique partnership of eight cities, three counties, and federal, regional and local agencies in the southern Willamette River Basin. The partnership inventoried and assessed resources, and established water resource-related protection policies. This distinctive opportunity explicitly considered and evaluated water resources policy development under Oregon Statewide Planning Goals 5 and 6.

With funding from the Environmental Protection Agency (EPA), the Department of Land Conservation and Development (DLCD), and local cities, the Multi-City/County Water Resources Assessment Project (MCWRAP) brought eight rural cities and three counties together to address the potential impacts of future development on natural resources. The project's primary objective was to guide and inform future growth. Working within Oregon's land use planning framework, the MCWRAP inventoried, assessed and prioritized natural resources at a detailed level while working and communicating collaboratively within the partnership. The MCWRAP utilized Lane Council of Governments (LCOG), a regional planning agency, to bring cities together as a team to provide benefits in a cost effective and efficient way.

1.1 MCWRAP Core Phases

The MCWRAP involved three core phases:

- 1. Inventory and Assessment:** This phase included landowner, public official and community notification and involvement, as well as field and office work necessary for wetland scientists to conduct Local Wetland and Riparian Area Inventories and functional assessments for each city. This provided local jurisdictions and state agencies accurate significant wetland and riparian resources locations in order to protect those areas from development. Concurrently, Lane and Benton Counties identified riparian areas for potential protection.
- 2. Inventory Report Development and Inventory Approval:** This phase ensured that all eight cities had accurate, adequate and approved Local Wetland Inventories (LWI). The wetland consultants completed reports and, with review from city, LCOG staff and the Oregon Department of State Lands (DSL) staff, all eight LWI reports were approved by DSL.
- 3. Local Policy Development and Adoption:** The final phase entailed local staff, local decision making bodies, and DLCD and DSL staff evaluating and balancing local policy alternatives. Within the state's regulatory parameters

the ultimate objective is adoption in each community. In addition to core policy development and adoption objectives, part of Phase 3 examined whether a more robust policy development process would result in better outcomes.

The inventory and assessment and approval Phases 1 and 2 used a methodology outlined in DSL’s administrative rules. The policy phase allowed greater flexibility and “local choice” on the level of natural resources protection.

1.2 Motivation to Participate

A variety of reasons motivated individual MCWRAP jurisdictions to pursue resource inventories. Although the full range of reasons is often complex, key motivations are outlined in Table 1.1 and factor into policy development:

Table 1.1 Key Motivations to Participate

Adair Village	Complete a survey of city-owned industrial land in Benton County (Camp Adair); move TMDL implementation forward
Cottage Grove	Satisfy state requirements associated with UGB expansion
Creswell	Satisfy state requirements associated with UGB expansion; move TMDL implementation forward
Harrisburg	Satisfy state UGB expansion requirements
Lowell	To eventually satisfy state UGB expansion requirements; move TMDL implementation forward
Mill City	Satisfy state UGB expansion requirements
Monroe	Facilitate better staff and property owner understanding of city’s water resources (increased predictability), stimulated by a particularly frustrating subdivision on land with resources
Scio	Facilitate better staff and property owner understanding of the city’s water resources (increased predictability)
Lane County	Determine relevance of city LWI findings on lands under county jurisdiction; determine relevance of county’s riparian ordinance adoption process
Benton County	Determine relevance of city LWI findings on lands under county jurisdiction; determine relevance of county’s riparian ordinance adoption process
Linn County	Determine relevance of city LWI findings on lands under county jurisdiction

MCWRAP support and coordination for county-level participants differed from city-level participants. All three counties expressed interest in LWI results for city study areas within the county’s jurisdiction. In addition, Lane and Benton Counties pursued county-wide riparian protection ordinances during the course of the project. County staff and other representatives often attended MCWRAP meetings and LCOG staff provided technical assistance to each county and coordinated city LWI results with each county.

1.3 Oregon's Water Resources Regulatory Framework

Oregon's statewide planning system is administered by the DLCD in partnership with numerous other agencies. While natural resources are addressed within a number of specific planning goals, Goal 5, Natural Resources, and Goal 6 Air, Land and Water, are the most applicable goals to wetlands and riparian area planning. The statutes that govern the DSL also contain significant regulatory framework elements that surround wetlands and riparian areas. This evaluation considered and integrated additional non-regulatory measures, such as incentives, education and low impact development to meet water resource related needs although not as thoroughly.

Goal 5 is a broad statewide planning goal that covers more than a dozen resources, including habitat, scenic and historic areas, and open spaces. The Goal mandates that local governments "adopt programs that will protect natural resources and conserve scenic, historic, and open space resources for present and future generations." Oregon Administrative Rules 660-023-000 through 660-023-0250 provide procedures and requirements that facilitate Goal 5 compliance.

Goal 5 offers local governments two approaches to achieve compliance: the Standard and the Safe Harbor approach. Through the Standard approach, a local jurisdiction can justify its decision to protect, partially protect or not protect a resource through an Economic, Social, Environmental, and Energy (ESEE) analysis. An ESEE analysis reviews the economic, social, environmental and energy consequences of not allowing, partially allowing or fully allowing conflicting uses such as public infrastructure. Cities therefore have an opportunity to prioritize objectives and move forward in a manner that addresses conflicting goals, uses and needs. The Safe Harbor approach specifies the level of protection for each Goal 5 resource. While the Standard method is more flexible, the Safe Harbor approach is less costly and less likely to be legally challenged.

Goal 6 seeks to maintain and improve the quality of air, water and land resources. The Goal requires that "all waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards." Unlike Goal 5, Goal 6 does not have Administrative Rules that establish clear standards to meet the goal. Instead, it relies on other state and federal regulations for direction and implementation. Although Goal 6 does not require an in-depth analysis like the Goal 5 Standard approach, a similar process is needed to establish findings that support limiting development in wetland and/or riparian areas.

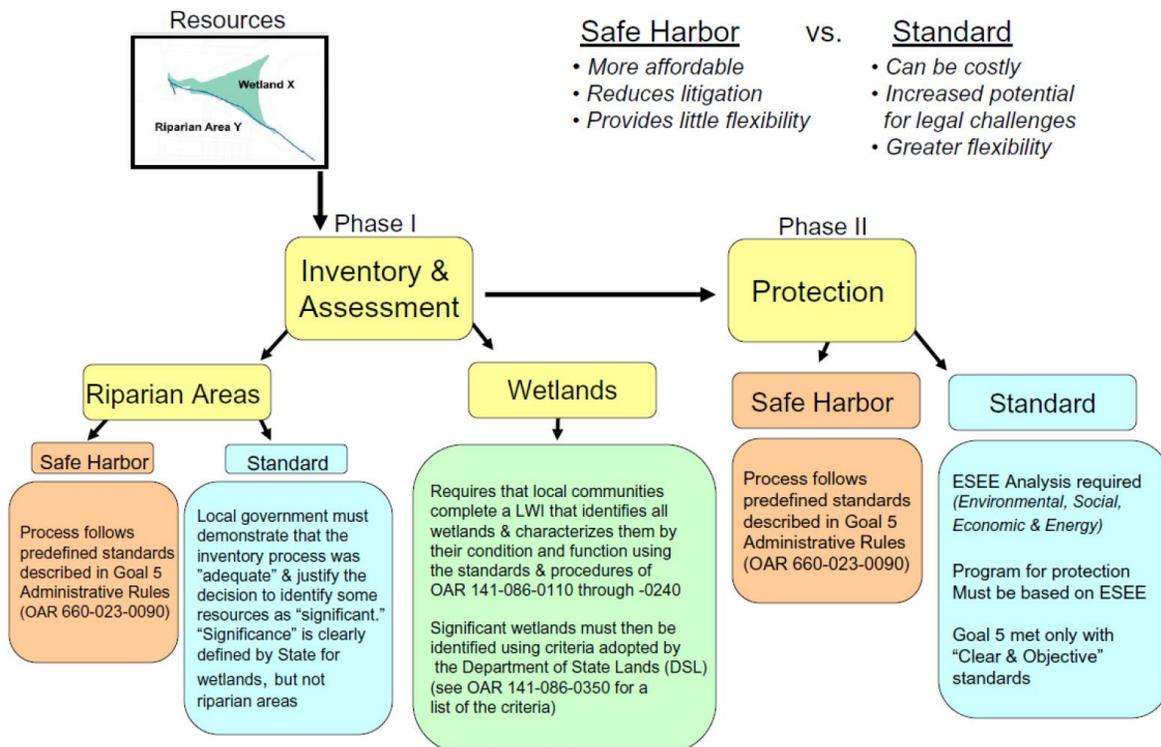
2.0 Processes for Developing Water Resources Policies

Following the wetland and riparian inventory and assessment process, each city selected from a variety of approaches available through Goals 5 or 6, or a combination of both Goals. City staff came to the project with different levels of exposure to and experience with natural resource planning. Although early phases focused on the inventories, assessments and LWI reports partners also considered policy elements and thought about the policy approach for their jurisdiction.

The *Water Resources Action Kit* provides assembled tools and resources based on extensive research regarding the regulatory framework and policy alternatives available to the cities and counties. The Action Kit synthesizes complex statutes, rules, models and case law into a sensible and understandable format for staff and decision makers. Figure 2.1 is an example of the type of resources included in the Action Kit. The Action Kit can be found at <http://www.lcog.org/southwillamettelwi/default.cfm> and contains sections on the following:

- Wetland Resources
- Riparian Resources
- Protection Alternatives/Model Ordinances
- Oregon Administrative Rules
- Citizen's Corner
- Goals 5 and 6
- ESEE Analysis

Figure 2.1. Example - Water Resources Action Kit Goal 5 and 6



Following the inventory and assessment phase, local jurisdictions began focusing on policy development strategies and preliminary policy approaches. City staff completed worksheets aimed at answering critical policy development questions including:

1. Do you have any early inclinations on the following regulatory and non-regulatory wetland and riparian policy alternatives? Check alternatives that you sense your city will be interested in pursuing. Alternatives included wetlands, riparian areas and non-regulatory policies.
2. Who will have the “first swing” in determining which of the listed alternatives should be considered/evaluated for your city? (e.g. staff, planning commission, city council, a committee, etc.)
3. How will your city make policy decisions? Outline the role(s) and the order envisioned for the policy development process to proceed.
4. If LCOG is able to staff one event/meeting in your policy development process what would you recommend?
5. What time frame do you envision for final LWI/Policy adoption by your city?

Because final decisions about policy had only just begun for most cities, city staff went with their “informed gut instinct” on the questions. Tables 2.1 and 2.2 summarize key responses during the initial policy approach consideration. These constitute the starting place for policy development in each of the communities.

Table 2.1. Initial Policy Concepts

City	What alternatives might interest your jurisdiction?		
	Riparian Areas	Wetlands	Non-Regulatory
Adair Village	<ul style="list-style-type: none"> Probably Goal 5 Safe Harbor approach (protecting only fish bearing streams) Possibly a mix of buffers/protections (council will want least impact on development) 	Possibly protect some Locally Significant Wetlands (LSW) and develop others, through ESEE analysis	<ul style="list-style-type: none"> Provide education and/or technical assistance to residents Encourage low impact development
Cottage Grove	<ul style="list-style-type: none"> Goal 5 Safe Harbor approach, protecting only fish bearing streams (currently in place) Adjust ordinance to include buffer around wetlands associated with streams 	Protect some LSWs and develop others, through ESEE analysis	<ul style="list-style-type: none"> Encourage low impact development Provide education and/or technical assistance to residents
Creswell	<ul style="list-style-type: none"> Protect non-fish bearing streams for water quality purposes Protect all waterways with a single buffer distance 	Protect some LSWs and develop others, through ESEE analysis Buffers on some LSWs	<ul style="list-style-type: none"> Provide education and/or technical assistance to residents Possibly develop density transfer and transfer of dev. Rights programs Encourage low impact development
Harrisburg	Goal 5 Safe Harbor approach (protecting only fish bearing streams)	Safe Harbor approach to protect LSWs	<ul style="list-style-type: none"> Provide education and/or technical assistance to residents Encourage low impact development
Lowell	<ul style="list-style-type: none"> Goal 5 Safe Harbor approach, protecting only fish bearing streams (currently in place) Not really interested in Buffers unless necessary for TMDLS 	Safe Harbor approach to protect LSWs	<ul style="list-style-type: none"> Provide education and/or technical assistance to residents Encourage low impact development
Mill City	A mix of buffers/protections based on locally determined criteria	Protect some LSWs and partially develop others, through ESEE analysis	<ul style="list-style-type: none"> Provide education and/or technical assistance to residents Encourage low impact development
Monroe	Goal 5 Safe Harbor approach (protecting only fish bearing streams)	Protect some LSWs and partially develop others, through ESEE analysis	N/A
Scio	A mix of buffers/protections based on locally determined criteria	Setback/buffers on all or some LSWs	Uncertain
Lane County	200 foot setback along the rivers and major tributaries for drinking water protection	Maintain status quo of notice to DSL	Outreach and education
Benton County	50 foot setback along fish bearing and all perennial streams for all of Benton County	Refine inventory of wetlands and mapping and maintain status quo of notice to DSL	Outreach, education and technical assistance
Linn County	Not interested in changes at this time	Not interested in changes at this time	Education

Table 2.2. Initial Policy Concepts

City	Preliminary Policy Development and Review Concept (numbers reflect sequencing)					
	City Council or Board of Commissioners	Planning Commission	Public	Stakeholders	Committees	Staff
Adair Village	1 hearing (3)*	1 meeting (2)				(1)
Cottage Grove	2 meetings (6)	2 meetings (5)	1 open house (4)	2 meetings (3)	5 meetings (2, 3)	(1)
Creswell	1-2 work sessions; 1-2 hearings (5)	1-2 work sessions; 1-2 hearings (4)	1-2 open houses (3)	1-2 open houses (3)	6 meetings (2)	(1)
Harrisburg		1 meeting (2)				(1)
Lowell	1 work session (4) 1 hearing (5)	2 work sessions (2) 1 hearing (3)				(1)
Mill City	1 hearing (5)	2 work sessions (2); 1 hearing (3)	1 open house (4)	1 open house (4)		(1)
Monroe	1 hearing (4)	1 hearing (3)	1 open house (2)			(1)
Scio	1 hearing (4)	2 work sessions 1 meeting 1 hearing (2)	1 open house (3)	1 open house (3)		(1)
Lane County	1 hearing (3)	1 meeting (2)			6 meetings (1)	(2)
Benton County					24 meetings (2)	(1)
Linn County	No changes anticipated	N/A	N/A	N/A	N/A	N/A

**Numbers (#) represent the sequencing of each step*

2.1 Initial Regulatory Concepts

A review of Table 2.1 shows a balance between Standard Goal 5 and Safe Harbor Goal 5 anticipated policy approaches. Most of the smallest cities preferred Safe Harbor, with a common theme from city staff being “my city council will want to do whatever is easiest.” Still, some communities felt early on that they would likely pursue a more customized strategy (Standard approach), including justifying buffer protections for some resources and impacts to others through the ESEE analysis process. This included the larger communities of Creswell and Cottage Grove, which have greater staff and financial resources, but also included Scio, Mill City and Adair Village which are among the smallest.

Only Creswell included the protection of all streams, including non-fish bearing, in its initial policy approach. Lowell made reference to protecting all streams as something that could be pursued if it was deemed necessary to meet TMDL requirements. In addition, most communities expressed interest in pursuing non-regulatory approaches to address water resource needs. Most common approaches included education and/or technical assistance to residents and encouraging low impact development.

2.2 The Who in Policy Development

Table 2.2 summarizes each city’s initial policy development process outline. The questions were framed as “Who will have the first swing in determining which of the listed alternatives should be considered and evaluated for your city?” and “How will your city make policy decisions?” City staff then outlined the roles and policy development process order. The results could be divided into two sub-groups: Those pursuing the bare minimum as defined in statute and those opting for more involved processes.

The bare minimum required by State law is a hearing at the local level. Harrisburg and Adair Village pursued this minimalist approach with no interested in an advisory committee, work sessions or an open house or any meeting explicitly dedicated to water resources policies and ordinances. Only an open house interested Monroe. In contrast, the smaller cities of Scio and Mill City included an open house and decision maker work sessions in their early concepts. Creswell and Cottage Grove included these elements, and added a new advisory committee to facilitate policy development. Based on MCWRAP data, city size is a predictor for policy development complexity only insofar as it indicates that larger cities (over 5,000) are less inclined to pursue the “bare minimum” approach.

The three MCWRAP counties initiated a water resources dialogue through a new Tri-County Water Resource Study Group. The group included representatives from each county board of commissioners, county staff, two regional councils of governments, city administrators, Oregon State University and state agency staff. The Study Group focused on ensuring an adequate supply of clean water for all stakeholders and beneficial uses, and informing local, state and federal decision-making. While all three counties participated in the Study Group, they envisioned separate individual paths.

Linn County opted for the status quo, and Lane and Benton Counties pursued riparian protection at the direction of staff and county commissioners.

2.3 The How in Policy Development

All communities identified policy development process sequencing and preliminary timelines for local adoption. The standard and most logical flow began with staff recommended policy alternatives followed by decision-maker work sessions. For several cities an open house could serve as an intermediate step between decision-maker meetings. Creswell and Cottage Grove initially included a committee as an intermediary between staff and an open house, including property owners and the public. Variation existed between the first “decision maker” meeting, with some cities including work sessions at the planning commission level, while others combined planning commission and city council work sessions. Still others proposed bringing the matter to decision-making bodies for the first time at the hearing to approve or deny the inventory and accompanying policies and ordinances.

Processes for riparian protection development differed significantly for the two counties. Benton County selected a robust stakeholder/public involvement route with additional support and input from a technical advisory group while Lane County relied primarily on a technical advisory group with little public involvement prior to Board of County Commissioner hearings. See Tables 2.3 and 2.4.

2.4 “Beyond the Status Quo”

Creswell, Cottage Grove, Mill City and Scio pursued policy development that went beyond the minimum and scope of the original MCWRAP project to provide a “maximum benefit scenario.” Explanations for which cities chose this approach go beyond city size and resources. Scio and Mill City are among the smallest cities in population. Other possible explanations include staff experience and/or personal interest in resource protection, as well as the level of existing protections or current protection efforts and issues within the city.

The more aggressive approach necessitated developing locally appropriate policy alternatives, identification of resource protection priorities, increased public and public official work sessions, broader public outreach efforts with supporting materials, and outlining of synergies and connections between related programs. An enhanced *Water Resource Land Use Action Kit* with new and revised support modules supported the more robust approach.

2.5 Final Policy in MCWRAP Jurisdictions

Final policy development required significant time and effort. Jurisdictions sponsored numerous open houses, work sessions, hearings and one-on-one meetings. The policy development strategy identified initially by each city was not, in every case, realized in practice. Tables 2.3 and 2.4 provide a summary of the policy development strategies

and outcomes within partner jurisdictions. A comparative evaluation of Tables 2.1 and 2.2 against Tables 2.3 and 2.4 reveals these distinctions. Areas where policy development differed from that which was conceptualized are shaded in grey within the tables.

2.5.1 Policy Development Processes Realized

Each community generally realized its public and stakeholder outreach strategies with a few exceptions.

Open Houses

Every community had two open houses related to the inventory and assessment phase of the project. Mill City and Scio opted not to have a policy-specific public open house as originally planned, in part, because Planning Commission work sessions were well attended. Cities held separate open houses dedicated to policy at their discretion.

Committees

Both counties and one city went forward with an advisory committee concept. Otherwise, forming local “committees” proved overly ambitious for the remaining five jurisdictions that identified it as a policy development concept. These communities determined that the process work and time associated with forming and meeting with the committee was not equal to the benefit. The city of Cottage Grove, for example, identified as many as five committee meetings as part of their policy development process, but did not ultimately pursue any form of committee involvement, opting instead on staff to develop policy recommendations for their planning commission and city council to consider.

Hearings

Hearings generally occurred in the manner anticipated partly because hearings are dictated by local procedure. Hearing are also, however, very unpredictable and are directly influenced by factors outside any one entity’s control. For example, the city of Monroe’s process stalled at the planning commission level due to questions posed by property owners and uncertainty by the planning commission. In Lowell, the city council also delayed approval in order to address some concerns posed by property owners. Substantial outreach to decision-makers and property owners meant greater consistency at public hearings.

Table 2.3. Final Policy Development and Review

City	How Was (Is) Policy Development (Sequencing) Ultimately Realized					
	City Council	Planning Commission	Public	Stakeholders	Committees	Staff
Adair Village	1 hearing (2)	1 meeting (1)				
Cottage Grove	2 meetings (3)	2 meetings (2)	No policy specific open house, or stakeholder and committee meetings			(1)
Creswell	1-2 work sessions; 1-2 hearings (6)	1-2 work sessions; 1-2 hearings (4, 5)	1-2 open houses (3)	1-2 open houses (3)	6 meetings (2)	(1)
Harrisburg	1 hearing (3)	1 meeting (2)				(1)
Lowell	1 hearings (3)	1 hearing (2)				(1)
Mill City	1 hearing (4)	2 work sessions (2); 1 hearing (3)	No policy specific open house		No committee	(1)
Monroe		1 hearing (2)	1 policy-specific open house			(1)
Scio	1 hearing (4)	3 work sessions (2); 1 hearing (3)	No policy specific open house		No committee	(1)
Lane County	1 hearing (3)	1 meeting (2)			6 meetings (1)	
Benton County	no hearing	no hearing			24 meetings	(1)

2.5.2 Resource Regulations

With the exception of Benton County, comparing original policy strategies to final strategies realized, the lack of adopted non-regulatory policies stands out. This is not surprising considering the minimal resources and attention dedicated to non-regulatory approaches through the MCWRAP. These policies may be more likely to come after regulatory approaches are in place.

Scio, Mill City and Adair Village originally proposed a Goal 5 Standard approach including an ESEE analysis to either expand protections or to allow impacts. These cities decided to pursue Safe Harbor protections. Even with partnership support, these communities could not set aside sufficient time or motivation for the more involved standard process. Scio and Mill City added a wetland ordinance provision that allows for property owner-driven ESEE analysis at the time of application.

Cottage Grove Community Development staff followed their planned approach of pursuing a site-specific ESEE analysis to address each significant wetlands unique characteristics and expected future uses. The resulting program combined limited and expanded protection. Activities allowed within the limited protection program include wetland restoration and enhancement activities, recreation and educational uses and adopted master plan activities.

Although Creswell has not completed their adoption process they are expecting to realize their original policy expectations of requiring buffers for expanded wetland protection.

Adair Village noted originally that they would “probably” take a Goal 5 Safe Harbor approach for riparian areas (protecting only fish bearing streams) and possibly include a mix of buffers/protections since their city council would prefer the least impact on development. They pursued a Goal 6 (Water Quality) approach resulting in a 20-foot buffer on all waterways.

Lowell originally intended to pursue Goal 5 Safe Harbor for riparian areas, protecting only fish bearing streams since they were “not really interested in buffers unless necessary for TMDLS.” Lowell pursued a Goal 6 (Water Quality) approach resulting in 25-foot buffer on all streams (including non-fish-bearing streams) having determined that this level of protection showed adequate TMDL compliance.

Scio and Mill City are served by the same planner who determined that the riparian and wetland adoption approaches were too complex and potentially controversial to address concurrently and decided to focus on wetland policy adoption first. Riparian area ordinances will be evaluated in a future phase that will likely include a Goal 5 Standard approach.

Among the cities, Lowell pursued protections that were greater than they had anticipated; Scio, Mill City and Adair Village pursued protections that were less than anticipated; and the remainder followed through with their original policy concepts.

Lane and Benton Counties realized very different riparian protection policy outcomes than originally anticipated. Public protest led Benton County to drop doing anything (regulatory or non-regulatory) outside of the Willamette Basin portion of the county. Within the Willamette Basin portion, Benton County shifted from a regulatory set-back requirement approach to a voluntary approach that relies on developing baseline information and ongoing monitoring; providing outreach and education to streamside landowners; and partnering with local organizations. Public protests regarding Lane County's proposed 200-foot setback resulted in Lane County dropping any new requirements.

Section 4.1 summarizes the general effectiveness of different policy approaches among other lessons learned from the process. Detailed policy and outcome summaries are included as Attachment A.

Table 2.4. Policies Alternatives Pursued and/or Adopted

City	What Policy Alternatives Were (Are) Ultimately Pursued?		
	Riparian Areas	Wetlands	Non-Regulatory
Adair Village	Goal 6 approach 20-foot buffer on all streams (non-fish bearing)	Safe Harbor approach to protect LSW	None instituted as of August 2014
Cottage Grove	Goal 5 Safe Harbor approach, protect only fish bearing streams (currently in place)	Protect some Locally Significant Wetlands (LSW) and develop others through ESEE Analysis	None instituted as of August 2014
Creswell	<ul style="list-style-type: none"> Protect non-fish bearing streams for water quality purposes Protect all waterways with a single buffer distance 	<ul style="list-style-type: none"> Protect some LSWs and develop others, through ESEE Analysis Buffers on some LSWs 	No new non-regulatory policies are in place. Significant voluntary resource actions and efforts with and through the local watershed council
Harrisburg	Goal 5 Safe Harbor approach (protect only fish bearing streams)	Safe Harbor approach to protect LSW	None instituted as of August 2014
Lowell	Goal 6 approach: 25-foot buffer on all streams (including non-fish bearing); necessary for TMDLS	Safe Harbor approach to protect LSW	None instituted as of August 2014
Mill City	No clear direction as of August 2014	Safe Harbor approach to protect LSW	No new non-regulatory policies are in place. Significant voluntary resource actions and efforts with and through the local watershed council
Monroe	Goal 5 Safe Harbor approach (protect only fish bearing streams)	Safe Harbor approach to protect LSW	None instituted as of February 2014
Scio	No clear direction as of August 2014	Safe Harbor approach to protect LSW	None instituted as of August 2014
Lane County	Riparian protection ordinance abandoned	N/A	Extensive outreach and meetings with residents especially in the McKenzie River sub-basin
Benton County	Voluntary protection measures only in the Willamette Basin portion of county	N/A	Voluntary protection measures only in the Willamette Basin portion of county

Note: Shaded cells indicate where actual policy development differed from conceptual or proposed policy development

3.0 Outcomes, Monitoring and Accounting

3.1 Outcomes

Section 2 reports on the how policy was ultimately realized and the paths taken to get there. Quantitative outcomes of the process serve as early indicators of project effectiveness. Section 3.0 reports on those indicators.

Public and Property Owner Involvement

Among the project success factors are how well the process included the public and stakeholders. For the initial and largest project outreach effort, the MCWRAP team printed and mailed about 1,500 letters with return envelopes to property owners that potentially had wetlands and/or riparian areas. The letter explained the project, the ecological services of wetlands and riparian areas, and requested permission to access property. Table 3.1 summarizes the response rate for each city. The table reflects a positive response rate that exceeded the project target of between 20% and 35%.

Table 3.1 Permissions Response Summary

	Taxlots		
	Access Requested	Access Granted	Access Percent
Harrisburg	213	97	45.5%
Monroe	97	47	48.5%
Adair Village	41	14	34.1%
Scio	128	52	40.6%
Mill City	224	63	28.1%
Creswell	293	66	22.5%
Cottage Grove	351	136	38.7%
Lowell	99	32	32.3%
TOTAL	1,446	507	35.1%

Table 3.2 summarizes attendance at the two open houses in each city.

Table 3.2 Open House Attendance

	Open House 1 Introduction	Open House 2 Results/Policy
Monroe	20	21
Adair Village	17	17
Scio	22	12
Mill City	30	27
Harrisburg	25	20
Creswell	35	33
Cottage Grove	30	14
Lowell	25	20

Table 3.2 reflects participation at the open houses. Partners and funders viewed MCWRAP outreach and involvement as a great success with improved outcomes, many of which are outlined in this section. Perhaps the most meaningful indicator of outreach success is that none of the ordinances and local wetland inventory adoptions resulted in an appeal.

Resource Protection

Table 3.3 provides MCWRAP resource protection quantification.

Table 3.3 Resource Protection Quantified

	Locally Significant Wetlands	Locally Significant Wetlands Acres	Other Wetlands	Other Wetlands Acres	Total Wetland Acres	Fish Bearing Streams	Miles of Fish Bearing Streams
Adair Village	3	13.49	12	17.05	30.54	0	0
Cottage Grove	38	132.03	9	2.32	134.35	6	29.33
Creswell	45	114.87	10	5.49	120.36	2	4.25
Harrisburg	3	2.85	25	182.65	185.5	1	1.72
Lowell	17	7.8	6	27.54	35.34	0	0
Mill City	8	54.2	4	2.24	56.44	4*	2.69
Monroe	7	36.2	5	2.96	39.16	1	0.18
Scio	6	16.23			16.23	2*	1.23
	127	377.67	71	240.25	617.92	16	39.41

Note: Non-fish bearing streams also protected include Lowell 2.1 miles, Creswell 0.5 miles, Adair Village 0.9 miles
**As of July 2014, Mill City and Scio do not yet have adopted riparian ordinances.*

The project resulted in 127 (378 acres) locally significant wetlands, with local protections. On the riparian side, the project directly addressed 16 streams with fish bearing status, representing over 39 miles of riparian habitat. These figures demonstrate strong resource outcomes.

3.2 Monitoring and Accounting

Monitoring and accounting of the MCWRAP is an opportunity to explore short and long term wetland assessment methods to help determine if strong policy results in higher quality wetlands. The success of the MCWRAP will be appraised and quantified through short term measurements (like those mentioned above), but also through medium, and long-term measurements. These can inform questions such as; whether the completed work changed the current situation, and whether the combination of work completed and resulting change achieved the desired environmental result.

Additional short-term achievement measures accomplished include:

- Increased elected official understanding of development practices impacts on surface and groundwater flow

- City-adopted watershed management policies and regulations
- Increased city staff knowledge about water resource planning issues, strategies and regulatory context
- Coordinated project buy-in and participation from all partners
- Increased knowledge among the public and public officials about watershed functions and values, hydrologic connectivity and support for protection of water resources
- Identification of acreage suitable for protection, restoration and development
- Finalized and state-approved Local Wetland and Riparian Inventories used by local jurisdictions as part of their long-range planning efforts and development permit review

Medium-term measures indicate whether participants use project outputs and whether this will result in change. For example, completed riparian inventories (output) result in cities adopting the inventory and instituting protection measures which result in progress toward long-term ecological targets. Some long-term project benefits can be tracked through DSL, DEQ, ODFW and DLCD databases that incorporate local wetland and riparian inventories into the state inventory and tracks changes to those resources over time. The databases will demonstrate improvement or sustenance of significant resources. Medium- and long-term measures of MCWRAP success include:

- Net reduction in impervious cover as compared to build-out under current regulations
- Decrease in peak flows and longer duration of stormwater retention measured by gauge stations
- Load reductions in heat, bacteria, sediment or toxic pollutant inputs resulting in streams de-listed from the federal section 303(d) list
- Increase support for water resource protection demonstrated by the number of new water resource initiatives from cities and non-profit partners
- No new threatened and endangered species listed and removal of species from the current list

4.0 MCWRAP Lessons Learned

As a “shared” effort, the MCWRAP incorporated a number of standardized elements. This included consistent wetland consultants, common letter templates and model code language as well as consistent guidance and advice. These commonalities achieved intended economies of scale, and kept each jurisdiction supported and informed about Oregon’s water resource regulatory framework. At the time of this report, six of eight MCWRAP cities have adopted inventories and regulations with a seventh near adoption. The project encountered significant diversity and complexity resulting in a mix of successes, and less successful project elements. Following are insights and lessons for future water resource projects, and particularly projects that involve inter-agency or inter-jurisdictional coordination.

4.1 General Effectiveness of Different Policy Approaches

There are a number of ways to define and conceptualize “effectiveness” within the MCWRAP project. For example, a process which results in no legal or other challenges may be viewed as a successful and “effective” process. At the project onset, some decision making bodies may have viewed success purely in such terms. Success or project effectiveness may also be defined as how it has or will likely result in wetlands and riparian area protection.

Figure 4.1. Relative Relationship between Policy Intensity and Resistance

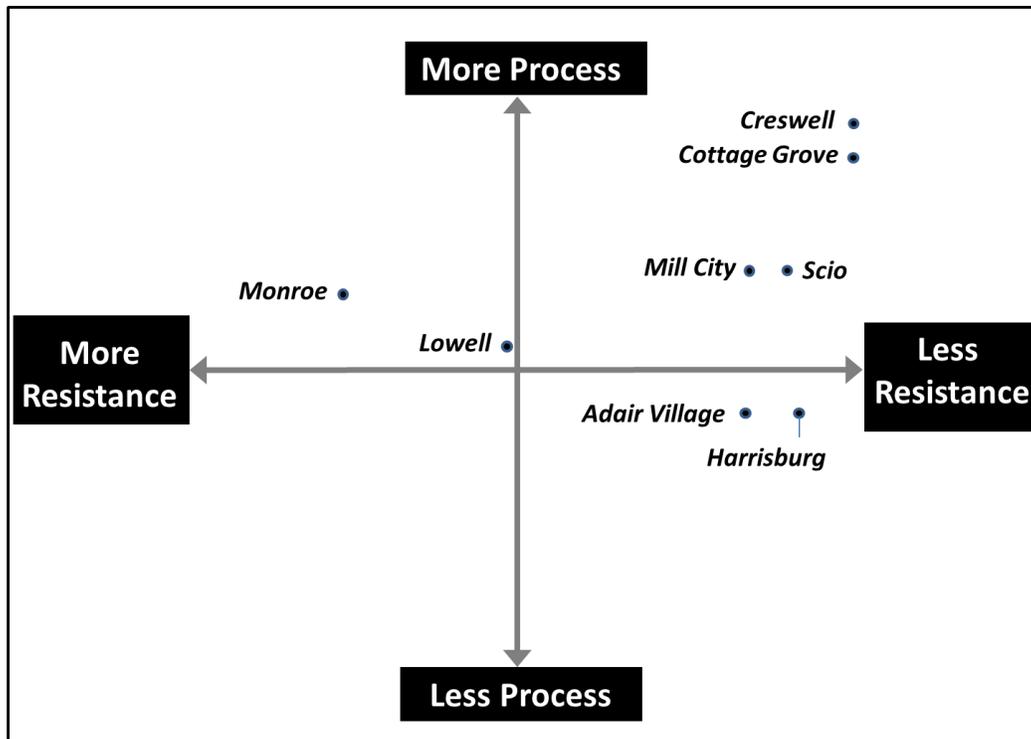
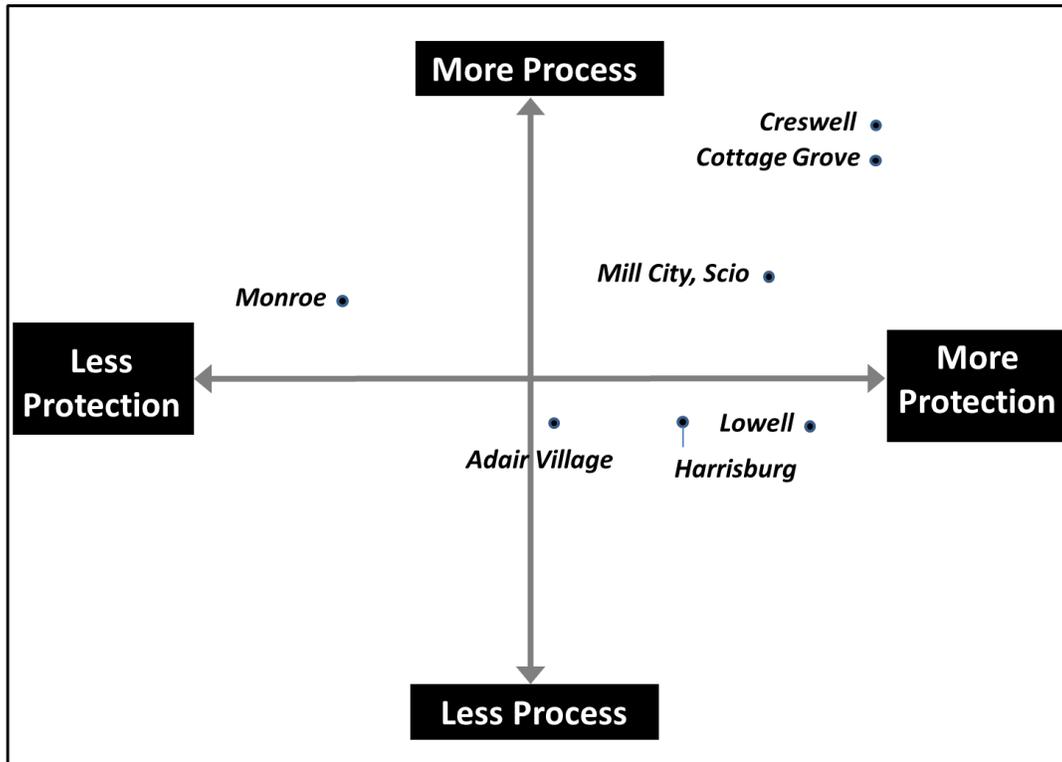


Figure 4.2. Relative Relationship between Policy Intensity and Resource Protection



Figures 4.1 and 4.2 present each cities process and results relative to the others (as assessed by MCWRAP staff). Process is defined through the number and intensity of meetings with the public and decision makers, and resistance is defined by the amount of controversy and opposition at meetings and through comments. The figures suggest that although nuanced, there is a basic relationship between higher levels of process and reduced resistance and greater levels of resource protection. Other factors to consider, however, include levels of protection already in existence, outspoken and influential stakeholders who may derail an otherwise effective process, and a community’s general disposition towards resource protection or regulation in general.

4.2. Public and Decision Maker Involvement

A core project component enabled extensive outreach at the public, stakeholder and decision maker levels. Outreach included at least two open houses in each community, advertised extensively. Targeted property owners had known (mapped) waterways and/or potential wetlands on their property. A project webpage also describes the project’s goals, objectives, approach, products and resources. Local newspapers published a number of articles.

Key public and decision-maker involvement findings and insights include:

- **Make the Connection**

The project team found that when conveying the benefits of protecting water resources, the public and decision makers had positive responses when focused on the benefits to humans rather than broad categories such as water quality or fish habitat. Decision makers are motivated by concepts such as clean drinking water, providing places to safely swim or catch fish (without getting sick from the water or fish), and reduced flooding potential.

- **Decision Maker Involvement**

The majority of MCWRAP cities achieved high levels of city council and planning commission involvement. Most cities held numerous public official work sessions (attended by the public) throughout the project. This resulted in decision-makers being well informed and ready for public meetings. A city with lower than average decision-maker involvement experienced negative results.

One city held three seemingly successful open houses. The first open house introduced the project and fielded property owner questions, while the second and third presented inventory results and policy concepts, and provided ample opportunity for questions and answers. A relatively large number of property owners attended the meetings but only one city councilor. No planning commissioners attended.

These open houses effectively transitioned property owners from skeptical, confused and defensive to informed, resigned (at worst) and agreeable (at best). By the third open house, well-informed property owners experienced few, if any, surprises. MCWRAP staff described this “Lions to Lambs” effect and noted the importance of the transition. The absence of planning commissioners and city councilors from these meetings meant that those decision-makers did not have important first-hand context.

When adoption of the inventory and associated policies came before this city’s planning commission, one outspoken property owner expressed concern. The decision-makers did not have sufficient context for the project and process and hesitated, ultimately failing to adopt the changes.

Lesson:

- *Involve decision-makers early, and foster and encourage their understanding of the whole picture so that they can make balanced and informed decisions*

- **Public Involvement Levels**

MCWRAP supported thorough public outreach that went well beyond statutory requirements. As has been noted, public involvement included numerous avenues of outreach such as open houses, work sessions, news media, fact sheets and a website. Public involvement success can be difficult to directly link to resource protection outcomes. However, perhaps one way to indicate public

involvement success is to examine outcomes when public involvement is minimal.

A community within the region, but not participating in the MCWRAP partnership, pursued a LWI and policy adoption concurrently with the MCWRAP. Unlike the MCWRAP cities, this community pursued outreach that addressed the minimum statutory standard (notice of adoption hearings only). No outreach to affected property owners to make them aware of the inventory occurred. The planner coordinating and overseeing this process noted that this clearly resulted in negative outcomes. Opposition to the proposals arose late in the process, when little could be done about the results. Significant frustration arose over the City's initial conclusions. The planner commented that significant benefit could have been achieved with more extensive and earlier outreach.

- **A Tale of Two Counties – Public Involvement**

Lane and Benton Counties engaged in riparian protections efforts but took different pathways. Benton County addressed riparian protection by initially examining the landscape function served by components associated with the riparian area and/or the adjacent upland area. Lane County approached riparian protection through proposed updates to the floodplain ordinance and by proposing a drinking water source protection overlay zone restricting development on all waterways within the Lane County portion of the Siuslaw and Willamette River Basin. The most significant nuance between the two approaches involved the process used to move new riparian protection measures forward.

Lane County determined that a technical advisory group and the public hearing process would be sufficient for public input. In the end, Lane County citizens expressed outrage at the lack of public input prior to going to hearing. The effort may have been doomed from the start given the fast track and lack of stakeholder input. The first public hearing was stopped after only initial proceedings because the normally sufficient venue presented a fire hazard as it was packed with several hundred citizens, many upset about the proposed ordinances. Written testimony included over 500 letters to the county board of commissioners. Although the proposed ordinances had many elements, conflict centered on a 200-foot riparian buffer that would prevent development or vegetation removal within that zone. From a technical standpoint the 200 foot setback could be supported. From a public standpoint, it could not.

The fairly robust Benton County process relied on a technical advisory committee, and numerous public open houses. Benton County strived for modest setback distances with a code that emphasized individual property owner rights and the need for riparian and wetland resource protection. Staff developed what they felt was a 'flexible' set of requirements whereby landowners could manage their stream sides to accommodate lower impact uses. Significant public opposition to the proposed Stream and Riparian Corridor Protection Overlay

Zone resulted in a largely voluntary protection program and removed an entire basin from the regulatory and non-regulatory program. Benton County also encountered issues with the implementation that would be necessary, increasing staff work load significantly with likely limited positive benefits. Additionally, staff didn't have a 'baseline' of riparian vegetation condition which meant that tracking progress towards enhancement would be impossible. In the end, Benton County struck a balance between voluntary and required protection of inventoried resources for the vital functions they provide.

Ultimately neither county ended up with the regulatory program that they set out to establish. Benton County put forth greater effort towards early and often outreach which led to a better outcome than Lane County. However, it is doubtful that Lane County would have achieved the 200 foot setback contemplated even with substantial public input. A positive component of the Lane County process (or lack of) was a heightened awareness of water resource issues and a greater openness among citizens to have a dialogue about those issues.

Lessons:

- *Take the time to ask for and incorporate stakeholder interests*
- *Inform people of how they can impact water quality. Many citizens do not see or understand how their actions impact water quality*
- *Look for a proper balance between resource protection and property rights*
- *Develop programs that combine regulatory and non-regulatory approaches*
- *Develop multiple regulatory approaches that are specific to the needs being addressed rather than trying to incorporate all protections within one ordinance. For example, Lane County could have addressed the water quality concerns with a lesser setback that included additional measures such as erosion and sediment control, limiting storage of hazardous materials, etc.*
- *Recognize that regulations will always be unpopular with some and potentially many, regardless of the outreach pursued*

4.3 Economy of Scale

MCWRAP included economies of scale benefits. This can be oversimplified as the cost saving measures of centralized management and higher quantities, but some economy resulted from the solidarity and strength of working through an issue together.

- **Efficiencies**

Undertaking a multi-jurisdictional effort led to efficiencies and completion of an enormous amount of work. These efficiencies are broad in range and depth, but several stand out including the following:

- Project Management. LCOG provided scheduling, project reporting and deliverable assurance. This meant local staff had time to address their specific concerns and to keep the consistency and efficiencies of the project on track.
 - Inventory and Assessment. Since multiple cities needed the same inventory and assessment work the MCWRAP secured reasonable wetland consultant pricing. The cost per city was less than it would have been if the cities had pursued the work individually. The cost for a small city to conduct an LWI would have been prohibitive for the majority of the MCWRAP partners on their own.
 - Code Development. Although cities realized efficiencies by participating in the group effort to develop model code, DLCD realized the greatest efficiency. Whereas DLCD would typically have to scrutinize, and often help customize, eight different ordinances, their participation in this process and assurances about the standardized code greatly streamlined their review process. The DEQ also realized significant benefits and efficiencies. The DEQ was able to intertwine riparian and wetland protection with city and county TMDL implementation planning.
 - Public Outreach. Even with different policies within each city, much of the public outreach could be standardized such as presentations, mailings and notices, briefing papers, mailing list generation, etc. Centralizing public feedback at LCOG meant efficiently and appropriately disseminated feedback to those who could address concerns and questions.
 - Tools and Resources. The MCWRAP resulted in an array of tools and resources used by the partners and available to other jurisdictions conducting an LWI. The *Water Resources Action Kit* contains number of these such as the ESEE analysis template. ESEE analysis can be a very unfamiliar, and therefore a very difficult, undertaking. A shared ESEE analysis template helped complete this difficult task. Other tools and resources within the action kit include:
 - Goal 5 requirements
 - Model code language
 - Model findings of fact
 - Citizen's corner
 - Fact sheets and water resource science basics
- **Project Solidarity and Strength in Numbers**
 MCWRAP partners often supported each other in pursuing things that might have otherwise been impractical or uncomfortable. The MCWRAP stressed city autonomy and uniqueness from the beginning. Cities never made decisions for solidarity sake, but such decisions often became a natural phenomenon. The positive momentum of one or more cities often had a positive effect on the relatively bold approaches and local successes. Quarterly MCWRAP meetings provided opportunities to exchange success stories, challenges, and encouraging words and advice.

Negative momentum had the same effect. Bad experiences and more conservative approaches could have ripple effects. For example, after raising the idea of postponing ESEE analysis for cities pursuing a Goal 5 Standard approach, many cities decided to do that. Although not a bad approach, using the ESEE template and other MCWRAP resources to complete the work as part of the project would have been the preferred long-term approach.

4.4. Importance of Local Staff

Working with staff from eight relatively small cities meant working with eight unique, capable and cooperative individuals and/or teams. Impressions related to local staff include:

- **Policy development**

Some communities overestimated their willingness or ability to undertake the policy development processes. There are a number of examples of communities making grander plans for policy development than they realized. In some cases, cities did not establish review committees and in others they ended up having fewer work sessions, or no additional open houses. No community underestimated its eventual policy development process. The processes didn't occur as planned for many and varied reasons but essentially it is hard to do more than less. Some communities could have implemented a more aggressive approach that would have reaped greater benefits. These could be viewed as missed opportunities

- **Success with diverse local staff**

Staff ranged from planners to administrators who work on many projects and had varied responsibilities, not just the MCWRAP. Most are attuned to the political will of their councils and commissions. Experience levels with natural resources planning and attitudes about resource protection are mixed. In each jurisdiction staff played a background role, whereas in others they took a lead role and became local resource protection champions. The MCWRAP allowed for close enough interaction with staff to generally navigate differing styles, interest levels and approaches. Each jurisdiction differed but local staff served as a key component to success.

Lessons:

- *The MCWRAP project emphasized collective benefits with individual approaches. Each city needed specific attention and each staff member had a style and approach best served by a uniquely customized approach.*
- *Staff will always have to weigh the costs of project approaches or project participation overall with the perceived benefits of participation. Many staff have numerous priorities which trump water resources protection, and this should be understood and respected.*
- *The most important factor among staff seemed to be general willingness and commitment to the process. No other staff factors seemed to be a*

strong and ubiquitous indicator for local success or failure. For example, cities with staff who had relatively little experience and/or passion for water resources still realized positive outcomes.

4.5. Agency, Jurisdiction and Contractor Coordination

The ability of participating agencies, wetland consultants, and jurisdictions to work cooperatively and in a well-coordinated manner helped the MCWRAP succeed.

Lessons and insights include:

- **Agency missions and mandates “greasing the regulatory skids”**
The MCWRAP cross program approach resulted in tangible benefits during the policy development and adoption phases. DEQ’s presence at a planning commission work session, for example, played a significant role in including more aggressive water resource protections in that city. TMDL implementation serves as a highly effective mechanism to motivate local staff and decision-makers. In the city of Scio, where record breaking flooding had just occurred, wetland and riparian area connections to floodplain management elevated the urgency and relevance of protecting natural resources.

Cross program maps identified and communicated water resource program overlaps and the benefits of coordination. Agencies working closely together on a specific project fostered increased inter-agency understanding of each other’s roles, rules, and missions.

- **Where are the teeth?**
Water resource regulations are often met with skepticism and apprehension both at a property owner level and in some cases, at planning commission and city council levels. Councils and commissions within the MCWRAP showed their willingness to support more aggressive approaches but requested mandates they could point to for potentially unpopular decisions. They hesitated to make policy level decisions which could be seen as their own agenda rather than as fulfilling state mandate. Councils preferred the “trying to be consistent with state or federal mandated regulations” rationale for decision making.

At the same time, agencies found themselves in a similar conundrum. Each agency had its regulatory foundation, but each also had limitations. DLCDC made an effort to put in place a sufficient protection program meeting certain minimum standards. To varying extents DEQ and DSL also implemented standards. Each agency but particularly DLCDC and DEQ seemed to be eager to see comprehensive resource protections realized, but in many cases the agencies were hesitant to push from a regulatory or enforcement perspective. Agencies found it uncomfortable to demand many of the regulations that they requested finding it difficult to point to a specific rule requirement (like a setback distance). With many councils and commissioners willing to be the messenger only, a number of more aggressive provisions could not be implemented or pursued

such as riparian area protection in Monroe and Adair Village. For example, while Safe Harbor standards apply to fish bearing streams only, staff could not obtain a definitive answer about the conflicting qualifiers of “fish bearing” status for a number of water features. Since this left the possibility of a legal challenge open, the cities did not put protections in place. Although TMDLs provided significant justification and leverage for local water resource regulations, often when pressed upon to clearly outline TMDL requirements, DEQ staff could not define clear requirements. In one city, the council would have applied an aggressive protective buffer, but backed off when DEQ’s response language about the buffer requirement did not provide enough support for the establishment of an aggressive buffer.

Lessons:

- *Clearer definitions of certain feature dynamics (e.g. fish bearing status) would lead to greater resource protections.*
- *Increased public support or heightened visibility of public support to reduce local decision-makers’ anxiety in making more policy decisions.*

- **The path of least resistance**

The strength of the regulatory teeth of state or federal programs often depend on the inclinations and personalities of individual state agency staff. At times agency staff conveyed different messages to different communities. For example, one DEQ staff person might stress a certain riparian buffer distance is required to meet TMDL allocations whereas another DEQ staff person would not. One DLCD staff person conveyed that a 15 foot buffer was sufficient while another staff advocated for more. In describing the state’s current wetland regulatory framework (essentially wetlands can be impacted with “mitigation”) DSL often confused community members who didn’t realize once local protection policy is in place, development of wetlands may be prohibited. Since the staff at each of the cities communicated with each other on a regular basis, this variability in messaging caused confusion. Such confusion resulted in the tendency to look for the “path of least resistance” to be actualized rather than the effort to identify all the necessary components for an effective resource protection program. For example, cities would point to Benton County and contend they did not need a local riparian protection ordinance at all. Such contention may be true as long as the city is taking other significant actions to protect riparian resources (such as those undertaken by Benton County).

Lessons:

- *Increased confidence on the part of regulatory agencies to require certain protections would support policies viewed by local decision-makers as risky.*
- *Making sure agencies understand how proposed programs or program alternatives relate to their agency’s mission and other agencies missions*

and coordinate with each other to reduce confusion and achieve maximum resource benefits.

- *Provide a training session for all state agency staff involved in the project to create better understanding of agency roles and to agree on common messaging.*

- **Whose jurisdiction is it anyway?**

Because the inventories and assessments addressed future growth potential, the study area included areas outside of each city's urban growth boundary (UGB) that are under county jurisdiction. While important, this is a sensitive topic since most cities had not yet initiated urban growth boundary expansion processes and therefore these expansion areas represented staff's best guess.

Beginning with the earliest open houses, certain cities encountered complications related to this dynamic. Confusion ranged from the city's policy, who would and could apply it, to why the city would care about wetlands outside of the UGB in the first place. In one city, the issue persisted throughout the process until the city removed the contentious features from inventory maps.

Lesson:

- *Cities could have benefitted from a more strategic and directed effort at addressing and informing citizens about the role of lands outside of the UGB. Open houses and other meeting should have called these lands out early and specifically, and made jurisdictional responsibility clear. Although complex, any city efforts to carefully choose and vet study area selections would reduce potential complications.*

- **Confidence in inventory results**

Catching and addressing inventory errors early in the process helps to build confidence in inventory results and reduces project delays. Promoting property owner review and input of the preliminary inventory helps with this process. In Lowell, a property owner raised significant concerns and claimed that his site was inaccurately assessed at Lowell's first public hearing on the inventory and accompanying regulations. DSL confirmed the property owner's concerns after field verification. This led to the discovery of a pattern of assessments inconsistent with DSL's standards, causing the wetland consultant to go back and change three cities' local significance determinations for wetland features.

Proper attention by the property owner during earlier outreach phases would have caught the error at a more appropriate time. Still, the matter had to be addressed. DSL, LCOG, the wetland consultants and the cities had to coordinate revisions. This directly or indirectly resulted in a year-long delay for Creswell and Cottage Grove. Part of the cost included reduced confidence in the results by property owners and the cities.

Lessons:

- *Closer inventory evaluation and coordination among wetland consultants, LCOG and DSL would have resulted in fewer mistakes*
 - *Fewer mistakes would have reduced or prevented significant delays in the inventory progress and the loss of confidence in inventory results*
 - *Inventory inaccuracies found early in the process did not seem to impact confidence levels. In fact, citizens seemed to be more confident in the overall results if they felt like they were being heard in the process.*
- **“We’ll let the state worry about it”**

Widespread, deep and understandable confusion exists about the overlapping nature of state and local wetland regulation. Many MCWRAP cities came to the project with the general perception that wetlands are the State’s concern. This is understandable because the cities did not have a Local Wetland Inventory or a local wetland protection program. Even after cities became aware of local Goal 5 requirements general confusion existed about the logic in providing protections that go beyond State (DSL) protections. Early on, the cities relied on the State’s wetland protection program. Helping cities understand Goal 5 and DLCD’s role in wetland protection proved more difficult than anticipated. Considering updates to the State’s wetland inventory (which occurs when DSL approves an LWI) to be sufficient protection tempted some cities. Although the MCWRAP presented a more comprehensive wetland regulation picture, city staff did not seem prepared to navigate nuances like jurisdictional overlap. Some cities asked why DSL had jurisdiction over locally significant wetlands that cities supposedly have jurisdiction over.

Lessons:

- *LCOG, DLCD and DSL staff made considerable efforts but could have better prepared MCWRAP city staff on local and state wetland regulation nuances.*
 - *City staff needed to better understand the distinctions between locally significant wetlands and other wetlands earlier.*
 - *Agencies needed to coordinate presentations to make sure that potentially confusing agency-specific components could be given greater project context (e.g. phrases like “all we are worried about is...” from one state agency can be easily misinterpreted by a property owner as “all the city and state are worried about is...”).*
- **A tale of two wetland consulting firms**

Two wetland consulting firms conducted the inventory and assessment work. One firm addressed the five northern cities and the other addressed the three southernmost Lane County cities.

Each firm had consistent instructions based on LWI statutory requirements, conducted outreach, and participated in initial MCWRAP group and public meetings. One firm communicated weekly and at times daily during their

inventory and assessment task. Though many questions and issues had relevance, one firm required more of LCOG and DSL staff time. At the same time, the other firm would not be heard from for long periods of time. Each of the two approaches presented a unique set of perceived and realized pros and cons.

Lesson:

- *A balance between the two approaches would have been most ideal. There are clear benefits to more communication and contact such as outcomes that are more thorough and potentially more accurate, but intensive correspondence can also mean increased staff costs. Less involvement and correspondence may demand less time and effort, but could result in more errors and complications in the end.*

4.6. Unique Local Dynamics

Each MCWRAP city and county had a unique dynamic. They also varied in size, history, political persuasions and water resources issues. Some dynamics had notable impacts on assessment and adoption processes.

- **How “significant” is the resource and who owns it?**

In every city, wetland and riparian dynamics differed. Not only is there variability in wetlands and riparian area types (e.g. forested vs emergent vs. open water wetlands) but also elements like local significance and ownership played a distinctive role. The city of Harrisburg, for example, is covered in hydric soils and therefore not surprising when the inventory revealed numerous wetlands (28) with the most acreage (. These wetlands, with two exceptions, were all emergent wetlands associated with agricultural lands, of relatively poor quality and not identified as locally significant. Harrisburg’s resulting adoption process was straightforward and non-controversial. The city of Cottage Grove, on the other hand, had a number of locally significant wetlands mostly located on publicly-owned land associated with the Row River. This made much of their wetland policy development adoption more tenable. Other cities faced complicated and controversial adoptions because of significant wetlands and/or significant wetlands on private properties that in the worst cases greatly impacted those properties.

Lesson:

- *Ultimately, comparable cities can have a similar number of wetlands and riparian areas identified and yet have very different inventory and regulation adoption processes, depending on the ownership and significance dynamics of the properties and wetlands themselves.*
- **The baby and the bathwater**
Inventories and policies for wetlands and riparian areas deal with nuanced and complex state planning rules. Some cities had difficulty with the distinctions, differences and alternatives of these rules. For example, interest in wetlands

was high but riparian area policy did not receive the attention it should have. In addition, controversy surrounded riparian areas therefore one city and two counties never fully addressed them. During the MCWRAP, a straightforward inventory element and policy adoption was rejected due to controversy or neglect of the other—the wetland “baby” was thrown out with the riparian area “bathwater.” In many cases the two issues often seemed too overwhelming for one meeting agenda.

One example is a city not opposed to proposed wetland regulations. However, the city rejected a combined wetland and riparian ordinance by decision-makers due to riparian area concerns of one property owner. That process has been derailed for this city and local adoption has not been achieved. Lane County also lost numerous non-controversial elements of a drinking water protection ordinance because of the lack of support for the riparian setback portion of the ordinance. Several cities, anticipating this dynamic, separated riparian area and wetland adoption processes to more success.

Lesson:

- *There is efficiency in bundling water resource efforts, but if one resource has more controversy surrounding it consider separate adoption processes.*

4.7. Leveraged Funding

The EPA’s investment in the MCWRAP enabled local and state agencies to leverage investments and maximize project outcomes. For example, DLCD’s three grants provided over \$150,000 to strengthen the project and supported opportunities to do more refined investigation of cutting edge tools like LiDAR imagery, ORWAP assessments and 3-D visualizations. Staff and decision-makers also leveraged significant time and attention on the MCWRAP.

With the initial MCWRAP grant almost complete, the partners successfully pursued a second EPA Wetland Program Development grant, leveraging success, momentum, and MCWRAP partners’ continuing commitment to the project. Outcomes included ESEE analysis support for more custom resource protection, and higher levels of outreach that garner greater local support.

Lessons:

- *Leverage funding and support opportunities by identifying shared objectives across programs.*
- *Large and small projects often reveal opportunities for spin-off or parallel projects. These should be considered.*

5.0 Conclusions and Key Insights

5.1. Models for Other Cities

The MCWRAP can serve as a model for other cities or groups of cities to follow. The *Water Resources Action Kit* and lessons learned can provide critical tools for considering: a) framing a project, b) potential partners and funding sources, c) efficiencies and economies of scale, d) outreach strategies and tools to pursue them, e) potential hazards, and a number of other tools.

The *Action Kit* could help beyond wetland and riparian area projects. Most of the principles could be applied to other natural resources (i.e. stormwater and parks) and there are elements that could inform projects in other disciplines (i.e. utility planning, or corridor planning). In addition, applicability and utility can be found by those engaging at a range of project scales, from the isolated wetland inventory in one community, to efforts at storm water planning by multiple jurisdictions and agency partners.

The MCWRAP's unprecedented scope of resource inventory, assessment and policy development, make it a valuable resource for lessons and model for future related projects. In dealing with ten individual and unique communities, the project reveals valuable lessons for any city pursuing (or considering) an individual process. The multi-jurisdictional and multi-agency dynamic of the project provide a truly unique and trail-blazing example and motivator for efforts to pursue similar projects. Following are key lessons and guidance for both the collective and individual approach.

5.2. Collaborative Water Resources Projects

- Make the connection and highlight the values that water resources provide to people. Water resource protection = clean drinking water. Many citizens said they did not see or understand how their actions impacted water quality. Communities working together can share outreach materials with some tailoring to address individual community issues.
- The greatest success will come from collaboration that balances efficiency and economies of scale with autonomy and recognition of each partner's uniqueness.
- Carefully outline a suite of policy development processes that answer the question: How will policy alternatives be developed and who will make the final decision(s)? Understand that more process may not be the answer in every situation. Make sure the process is sensitive to the local (and regional) context.
- Involve agency and jurisdictional decision-makers early and foster their understanding of the whole picture so that they can be positive champions and make balanced and informed decisions.
- Make sure agencies understand how proposed programs or program alternatives relate to their agency's mission and coordinate a common strategy to reduce confusion and achieve maximum resource benefits.
- Develop programs that combine regulatory and non-regulatory approaches.

- Develop multiple regulatory approaches that are specific to the needs being addressed rather than trying to incorporate all protection within one ordinance.
- Recognize that regulations will be unpopular with some and potentially many regardless of outreach.
- Leverage funding and support opportunities by identifying shared objectives across programs.
- Large and small projects often reveal opportunities for spin-off or parallel projects. These should be considered.
- Do not assume that partners, particularly agency representatives, fully understand the nuances of rules and missions of other partner agencies. Dedicate time upfront to develop mutual understanding and a joint message that is relevant in the greater project context.
- If incorporating subcontract help, consider their communication style and determine if it suits the project manager's style (i.e, frequency of check-ins, methods for quality control).
- Accept and work around the fact that partner staff, generally speaking, will always weigh project approach costs or project participation with the perceived benefits of participation. Many staff have priorities which may trump this project, and this must be understood and respected.
- The most important factor among staff seemed to be general willingness and commitment to the process. No other staff factors seemed to be a strong and ubiquitous indicator for local success or failure. For example, cities with staff who had relatively little experience and/or passion for water resources still realized positive outcomes.
- Increase confidence on the part of regulatory partners to require certain protections would support policies viewed by local decision makers as risky.
- Local decision-makers would benefit from increased public support, or heightened visibility of public support, to reduce anxieties in making bolder policy decisions.

5.3. Individual Jurisdiction Water Resources Projects

- Take the time and make the effort to ask for and incorporate stakeholder involvement. Involvement from the outset provides the greatest potential for mutual respect and positive outcomes.
- Carefully choose a policy development process answering the question: How will policy alternatives be developed and who will make the final decision(s)? Understand that more process is not always the answer. Make sure the process is context sensitive.
- Recognize that regulations will be unpopular with some and potentially many, regardless of outreach.
- Inform people of how they can impact water quality. Many citizens said they did not see or understand how their actions were impacting water quality.
- Highlight the benefits that water resources provide to people (like clean drinking water) and avoid broader concepts like "protecting water quality".

- Local decision-makers would benefit from increased public support, or heightened visibility of public support, to reduce anxieties in making bolder policy decisions.
- Develop programs that combine regulatory and non-regulatory approaches.
- Develop multiple regulatory approaches that are specific to the needs being addressed rather than trying to incorporate all protection within one ordinance.
- View regulatory and other relevant agencies as project partners, and involve them early and often. Use *Water Resources Action Kit* cross program resources to determine interest and solicit project assistance.
- Bundling water resource efforts may be efficient but if one resource has more controversy surrounding it, consider separate adoption processes.
- Foster agency understanding of the whole picture so that they can become champions and make balanced and informed decisions.
- Work with agencies to understand how your proposed programs or program alternatives relate to their agency's mission and coordinate a common strategy to reduce confusion or redundancy and achieve maximum resource benefits.
- Natural resources projects often reveal opportunities for spin-off or parallel projects. Consider these internally and with agency partners.
- Don't assume that agency representatives fully understand the nuances of other partner agencies. Dedicate time upfront to develop mutual understanding and a joint message that is relevant in the greater project context.
- Coordinate closely with sub-consultants and facilitate coordination between sub-consultants and applicable agencies to minimize time consuming and costly oversights. Every error will erode stakeholder trust.
- Choose your study area carefully and try to understand and avoid unnecessary controversy.
- The most important factor for local staff in most resource protection processes is a general willingness and commitment to the process. For example, cities with staff who had relatively little experience and/or passion for water resources still generally realized positive outcomes.

Attachment A. City Specific Wetland and Riparian Policy

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Lowell	1,045	902	22	35.4	4	(0) / 0
<p>Wetland Policy Before: No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands. Specific provision in code allowing a Comprehensive Plan amendment for an ESEE analysis once a property owner is interested in potentially developing the property.</p> <p>Riparian Policy Before: No local protection</p> <p>Updated Riparian Policy: Safe harbor (Dexter Lake) 50 feet. All other streams – 25 feet.</p> <p>Issues</p> <ul style="list-style-type: none"> • Inventory changed mid-way through process. Citizen “complaint” during hearings process although prior opportunities for public involvement. • Very conservative politically so impressive given that political climate. • Long term City Administer leaving. <p>Notes Ordinance also provided flood hazard and hillside development standards.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Monroe	617	393	12	39.16	7	(1) / 0.18
<p>No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands with clause that allows for ESEE with comprehensive plan amendment.*</p> <p>Riparian Policy Before: 20 foot setback from mean high water line of the Long Tom River and 10 feet of (the mean high water line of) Shafer Creek.</p> <p>Updated Riparian Policy: 50 foot setback form Long Tom and Shafer’s Creek.</p> <p>Issues</p> <ul style="list-style-type: none"> • How fish bearing streams are defined presented both a challenge and an “out” for including one stream. • Misunderstanding of the LWI process and the “surprise” that they had to do anything for protection beyond existing state and federal requirements. • Most public officials did not attend public open houses and only heard a few public voices once in the hearing process resulting in a planning commission denial of the proposal at its first hearing. • It is the opinion of staff that the wetland elements of their ordinance were “hijacked” by the more controversial riparian elements (through a particularly concerned and vocal property owner). <p>Notes The only parcel where the presence of wetlands presented a substantial problem in terms of loss of full use already has an approved sub-division that will not be “impacted” by the current protection decision.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Adair Village	840	421	15	30.54	3	(0) / 0
<p>Wetland Policy Before: Wetlands associated with “Drainage Ways” were protected by a 20-foot buffer.</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands. Specific provision in code allowing a Comprehensive Plan amendment for an ESEE analysis once a property owner is interested in potentially developing the property.</p> <p>Riparian Policy Before: Protection setback 20 feet from centerline of “drainage ways” (identified solely as Bowers Slough and Calloway Creek)</p> <p>Updated Riparian Policy: 25 foot setback from top of bank of all “drainage ways” (identified solely as Bowers Slough and Calloway Creek)</p> <p>Issues</p> <ul style="list-style-type: none"> • How fish bearing streams are defined presented both a challenge and an “out” for including one stream. • Appearances before decision making bodies were never through a dedicated work session, but as an agenda item (among several). This was the case for the open house as well. • City Manager took lead and was constrained by limited capacity to address project. <p>Notes The primary motivation for Adair Village to participate in this project was the opportunity to have an evaluation of City owned industrial land (former Camp Adair) performed. The site is not within city limits or UGB and therefore its only current regulatory significance is with Benton County.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Scio	838	386	6	16.23	6	(2) / 1.23
<p>Wetland Policy Before: No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands. Specific provision in code allowing a Comprehensive Plan amendment for an ESEE analysis once a property owner is interested in potentially developing the property.</p> <p>Riparian Policy Before: No local protection</p> <p>Updated Riparian Policy: None as of August 2014</p> <p>Issues</p> <ul style="list-style-type: none"> • Important for people to keep the waterways “clean” to support irrigation district • Small groups but substantial conversation • Public officials very present at public open houses • Flooding in early 2012 made the hydrologic control elements of the MCWRAP work very relevant. Desire to keep wetlands increased after this event. <p>Notes Wetland were constrained from development in some way anyway.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Mill City	1,855	1,160	12	56.44	8	(4) / 2.69
<p>Wetland Policy Before: No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands. Specific provision in code allowing a Comprehensive Plan amendment for an ESEE analysis once a property owner is interested in potentially developing the property.</p> <p>Riparian Policy Before: 25 foot buffers</p> <p>Updated Riparian Policy: None as of August 2014 but they are considering a Goal 6 approach.</p> <p>Issues</p> <ul style="list-style-type: none"> • Significant challenges emerged from properties outside of the UGB being included within the Study Area. One persistent property owner initiated the removal of a significant area within the southeast of the study area (along DeFord Creek) to be removed. Outreach was extensive but not successful in allaying concerns of property owners. • Significant opportunities are present in association with restoration efforts by the North Santiam Watershed council along Snake and DeFord Creeks. <p>Mill City Staff determined that it would be best to separate wetland and riparian efforts due to their individual complexities and a risk of overly complicating each individual process.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Harrisburg	3,567	1,466	25	185.5	3	(1) / 1.72
<p>Wetland Policy Before: No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands.</p> <p>Riparian Policy Before: None</p> <p>Updated Riparian Policy: Goal 5 Safe Harbor approach (protect only fish bearing streams)</p> <p>Issues</p> <p>Almost the entire City of Harrisburg is on hydric soils. Harrisburg had a significant number of wetlands, but these were almost exclusively agricultural lands that have been impacted and are therefore not highly effective in any of the key wetland functions. Therefore Harrisburg</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Creswell	5,031	1,646	55	120.36	45	(2) / 4.25
<p>Wetland Policy Before: No local protections</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands, expect where ESEE analysis has identified either justification for limited impacts, or additional protection (setbacks).</p> <p>Riparian Policy Before: 50 foot setback and limited permitted activities</p> <p>Updated Riparian Policy: 50 foot setbacks from all significant waterways (Hills Creek system).</p> <p>Issues</p> <ul style="list-style-type: none"> • Inventory changed mid-way through process. Citizen “complaint” during hearings process in Lowell resulted in reevaluation of all assessments performed by the wetland consultant (due to an interpretation discrepancy). This resulted in the removal of several “local significance” designations for several wetlands, and was a key element in the current postponement of the adoption process. • The political climate in Creswell has been tenuous in recent years, with an overhaul of the city council and change in city management. This along with controversial issues t have occupied the city’s attention, making the LWI a lower priority. Adoption will be initiated with the overall adoption of their comprehensive plan update. • The city of Creswell is very motivated by water quality issues and has a planner who has been very engaged with the MCWRAP process. <p>The city of Creswell is the only city which has, and intends to use a committee in its policy adoption process.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Cottage Grove	9,686	3,357	47	134.35	38	(6) / 29.33
<p>Wetland Policy Before: National Wetland Inventory adopted as a preliminary inventory, but no local protections in place.</p> <p>Updated Wetland Policy: Safe Harbor protection for all significant wetlands, expect where ESEE analysis has identified justification for limited impacts.</p> <p>Riparian Policy Before: Safe harbor riparian protections</p> <p>Updated Riparian Policy: Continuation of safe harbor riparian protections (as well as a few additional waterways inventoried).</p> <p>Issues</p> <ul style="list-style-type: none"> • Inventory changed mid-way through process. Citizen “complaint” during hearings process in Lowell resulted in reevaluation of all assessments performed by ESA (due to an interpretation discrepancy). This resulted in the removal of several “local significance” designations for several wetlands, and delayed adoption significantly (as well as resulting in ripple effects for the city’s ESEE analysis). <p>The majority of Cottage Grove’s water resources are located on publicly owned land. This creates opportunities and a policy dynamic somewhat unique.</p>						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Lane County	351,751	--	--	--	--	--
<p>Riparian Policy Before: Setback distance of 50 feet for non-resource zones and 100 feet for farm and forest resource zones.</p> <p>Updated Riparian Policy: No updated</p> <p>Issues</p> <ul style="list-style-type: none"> • Citizen opposition over proposed 200-foot setback. Process tabled by county indefinitely. Many “good” and supported elements of the ordinance were lost due to the controversy of the 200 foot setback. 						

	2010 Population	Study Area Acres	Number of Wetlands	Acres of Wetland	Locally Significant	Fish Bearing Streams (#) / Miles
Benton County	85,579	--	--	--	--	--
<p>Updated Riparian Policy: Voluntary Program for Riparian Resources providing education and outreach for streamside landowners, in addition to monitoring riparian vegetation cover.</p> <p>Issues</p> <ul style="list-style-type: none"> • Proposed regulatory policies unpopular with stakeholders. Alsea Basin removed entirely from program. End result was voluntary program. <p>Note: Formal correspondence with DEQ, Western Region Water Quality staff and managers has occurred during the development of the non-regulatory program, to confirm that any program that may be adopted by Benton County, meets all current state water quality requirements.</p>						