

# SUPPLEMENTAL MATERIAL

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**TABLE 1**  
**Examples of Current Water Quality Projects and/or Issues in Lane County**

Project/Program	Problem/Issue	Guiding Document and/or Process	Desired Environmental Outcomes	Examples of Potential County Actions
<b>Southern Willamette Valley Groundwater Management Area</b>	High nitrate in groundwater – risk to public and domestic drinking water in portions of Linn, Lane, and Benton Counties.	<ul style="list-style-type: none"> <li><i>Southern Willamette Valley Groundwater Management Area Action Plan.</i></li> <li>15 member stakeholder Committee.</li> </ul>	Reduce nitrate contributions to target a 7 mg/L threshold.	<ul style="list-style-type: none"> <li>Septic system standards (density and/or system type)</li> <li>Possibly rural animal waste</li> <li>Domestic well water standards</li> <li>Education and outreach</li> </ul> <p><i>Likely to come to Board for consideration within 2 years</i></p>
<b>Willamette Basin Total Maximum Daily Loads (TMDLs)</b>	Temperature, mercury, and bacteria standards that protect beneficial uses are not being met.	<ul style="list-style-type: none"> <li><i>Lane County Willamette Basin Total Maximum Daily Load Implementation Plan.</i></li> <li>TMDL implementation plans for each of the cities in Willamette Basin.</li> </ul>	Reduce heat, bacteria, and mercury loading in Willamette River Basin.	<ul style="list-style-type: none"> <li>Erosion control and/or stormwater ordinance</li> <li>Septic system standards</li> <li>Riparian ordinance and/or education</li> <li>Multiple education and outreach techniques</li> </ul> <p><i>Likely to come to Board for consideration within 2 years</i></p>
<b>Siuslaw Watershed TMDL</b>	Temperature, sediment, dissolved oxygen, bacteria	<ul style="list-style-type: none"> <li><i>Siuslaw Watershed Assessment (January, 2002)</i></li> <li>TMDL Development with public comment period scheduled for 2010</li> </ul>	Reduce heat, bacteria, sediment, and nutrients in Siuslaw Watershed	<ul style="list-style-type: none"> <li>Erosion control and/or stormwater ordinance</li> <li>Septic system standards</li> <li>Riparian ordinance and/or education</li> <li>Other education and outreach techniques</li> </ul> <p><i>Likely to come to Board for consideration within 2 years</i></p>
<b>Drinking Water Source Protection (surface water)</b>	Potential contaminant risks identified in Source Water Assessments.	<ul style="list-style-type: none"> <li>Source Water Assessments for public surface water systems.</li> <li>Public water system workshops identified priorities for county actions.</li> <li>Drinking Water Protection Plans for two of the cities with surface water systems.</li> </ul>	Reduce risks from potential sources such as chemical storage, septic systems, erosion, insufficient riparian areas, animal waste, hazardous materials spills, pharmaceuticals and personal care products.	<ul style="list-style-type: none"> <li>Erosion control ordinance and/or education</li> <li>Septic system standards</li> <li>Riparian ordinance and/or education</li> <li>Public water system notification and standing for land use applications</li> <li>Restrictions on chemical storage</li> <li>Adopt County drinking water source area overlay map with protection criteria.</li> <li>Education and outreach</li> </ul> <p><i>Likely to come to Board for consideration within 2 years</i></p>
<b>Drinking Water Source Protection (groundwater)</b>	Potential contaminant risks identified in Source Water Assessments.  Septic system contamination concerns in Florence Sole Source Aquifer.	<ul style="list-style-type: none"> <li>Source Water Assessments for public groundwater systems.</li> <li>Public water system workshops identified priorities for county actions.</li> <li>Drinking Water Protection Plans for six of the cities with groundwater systems.</li> </ul>	Reduce risks from potential sources such as chemical storage, septic systems, animal waste, hazardous materials spills, pharmaceuticals and personal care products.	<ul style="list-style-type: none"> <li>Adopt County drinking water source area overlay map with protection criteria.</li> <li>Septic system standards</li> <li>Public water system notification and standing for land use applications</li> <li>Restrictions on chemical storage</li> <li>Domestic well abandonment</li> <li>Education and outreach</li> </ul> <p><i>Likely to come to Board for consideration within 2 years</i></p>

**TABLE 1**

**Examples of Current Water Quality Projects and/or Issues in Lane County**

Project/Program	Problem/Issue	Guiding Document and/or Process	Desired Environmental Outcomes	Examples of Potential County Actions
<p><b>Benton County Water Project (Tri-county implications)</b></p>	<p>Need for current and future water supply analysis incorporating quantity and quality.</p>	<ul style="list-style-type: none"> <li>Benton County Water Supply and Forecast Analysis</li> <li>Steering Committee of stakeholders</li> </ul>	<p>Have sufficient supply of high quality water for all beneficial uses.</p>	<ul style="list-style-type: none"> <li>Work with cities and other stakeholders within County to address quantity and quality needs.</li> <li>Work with adjacent Counties and serve as model for tri-county regional work to examine common water resource issues. <i>Likely to come to Board for consideration within 2 years.</i></li> </ul>
<p><b>Watershed Council Initiatives</b></p>	<p>Water quality issues impacting fish and other beneficial uses.</p>	<ul style="list-style-type: none"> <li>Individual watershed assessments and Action Plans.</li> <li>Stakeholder based council meetings.</li> </ul>	<p>To have high quality water to meet multiple needs.</p>	<ul style="list-style-type: none"> <li>Riparian ordinance and/or education</li> <li>Multiple education and outreach techniques <i>Likely to come to Board for consideration within 2 years.</i></li> </ul>
<p><b>Willamette Basin Biological Opinion Implementation</b></p>	<p>Storage water flows and operation changes in the main stem and tributaries of Willamette River</p>	<ul style="list-style-type: none"> <li>NOAA Marine Fisheries 2008 Biological Opinion Implementation; coordination led by US Army Corps, US Bureau of Reclamation and State agencies</li> </ul>	<p>Meet temperature and salmon spawning/migration needs.</p>	<ul style="list-style-type: none"> <li>Understanding County effects from Biological Opinion Implementation</li> <li>Determine collaborative possibilities with Biological Opinion Implementation groups.</li> </ul>
<p><b>Threatened and Endangered Species</b></p>	<p>Of 31 native fish species, about 1/5 are as threatened, endangered, or sensitive and only 13% are considered tolerant of pollution.</p>	<ul style="list-style-type: none"> <li>Endangered Species Act</li> <li>Individual jurisdictions/agencies develop programs to protect Threatened and Endangered species.</li> </ul>	<p>Recovery of threatened and endangered species</p>	<ul style="list-style-type: none"> <li>Riparian ordinance and/or education</li> <li>Restrict development in sensitive areas such as meander zones within floodplains.</li> <li>Erosion control ordinances and/or education</li> </ul>
<p><b>Statewide Planning Goal 5 and 6 (Natural Resources and Water Quality)</b></p>	<p>Wetland and riparian areas not adequately identified, assessed, protected. National Wetland Inventory too course.</p>	<ul style="list-style-type: none"> <li>Jurisdictions must complete Goal 5 inventories during Comp. Plan update or UGB expansion.</li> <li>Nearly all cities will have completed inventories and assessments.</li> <li>Watershed Councils have done some assessments.</li> </ul>	<p>Identify and assess wetlands and riparian resources to determine which ones are significant and need to be protected</p>	<ul style="list-style-type: none"> <li>Refine and map County wetland and riparian inventories.</li> <li>Guide growth and development in a way that helps protect wetland and riparian resources. <i>Likely to come to Board for consideration within 2 years.</i></li> </ul>
<p><b>Domestic Wells</b></p>	<p>No drinking water standards for domestic wells. Abandoned wells become contaminant conduits.</p>	<ul style="list-style-type: none"> <li>Limited—newly adopted State law to map and pay for assessment of newly drilled domestic wells</li> <li>Decommissioning of abandoned wells (required but not commonly done)</li> </ul>	<p>Protect drinking water quality and maintain an adequate supply for rural residents.</p>	<ul style="list-style-type: none"> <li>Develop drinking water standards for domestic wells such as for nitrate, bacteria, arsenic.</li> <li>Identify abandoned wells</li> <li>Identify exact location of domestic wells</li> </ul>

# Watershed Councils in Lane County

Coast Fork Willamette ▪ Long Tom ▪ McKenzie  
Middle Fork Willamette ▪ Siuslaw

August 20, 2009

Lane County Commissioners  
125 East 8<sup>th</sup> Avenue  
Eugene, OR 97401

Memo: Work Session- Floodplain and Riparian Development

Dear Commissioners,

The McKenzie, Middle Fork Willamette, Coast Fork Willamette, Long Tom and Siuslaw Watershed Councils appreciate the opportunity to report back to the Lane County Board of Commissioners on the efforts that have been accomplished relating to floodplain and riparian protection since our last meeting in April 2009. Since April, we've pulled together a group of interested organizations and agencies to identify opportunities for continued work with our County partners. We've reviewed the growing body of research to find overlapping issues and mutual interests that have the greatest potential for multiple benefits. This memo briefly outlines the various issues that relate to development in the floodplain and riparian areas, the results of research and studies on the impacts of development on water quality, and our recommendations for moving forward in a collaborative way to take advantage of these opportunities to make positive and meaningful progress toward protecting critical water resources in Lane County.

## **Floodplain and Riparian Development Impacts**

The U of O and EWEB conducted a number of studies that evaluated impacts from development in the floodplain and riparian areas on water quality in the McKenzie Watershed. Although this work was focused on the McKenzie Watershed, the results are applicable across Lane County. Safe drinking water is vital to the economic health and livability of Lane County communities. In Lane County there are currently 247 public water systems that have delineated drinking water source areas (DWSAs). Sixty-seven of those are community water systems. These range from large systems like EWEB, SUB, and Cottage Grove, to smaller systems such as mobile home parks and water districts that serve fewer than 100 people. The 67 community water systems serve a total population of 279,413 people, or 83% of the Lane County population.

In fall 2009, the EWEB septic system cluster study and the U of O work will be completed. The septic system study is primarily grant funded and focuses on assessing impacts from septic system cluster areas and assisting homeowners with septic system inspections and pump-outs. The second study utilizes University of Oregon faculty and graduate students in the Community Planning Workshop (CPW) to evaluate Lane County code from a drinking water source protection perspective. One of the studies objectives was to document how county code is being implemented on the ground and gain insight

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about how code implementation helps protect or puts water quality at risk. This research can inform development of future ordinances or code revisions to address these issues and avoid unintended consequences. The following is a summary of initial observations resulting from these analyses:

- Septic systems, especially those within higher density areas, or clusters, and/or located near the river in soils that are excessively permeable, pose a threat to water quality due to reduced treatment of domestic wastewater and short travel time to the river. Water quality monitoring from samples collected downstream of septic system cluster areas indicated an increase in bacteria and nutrient concentrations in shallow groundwater and in the McKenzie River when compared to upgradient or upstream samples. Once installed there is little or no regulatory oversight of septic systems.
- Development along the river can pose a threat to water quality due to loss of riparian vegetation that buffers impacts from runoff of pesticides, paint, wood treatment chemicals, fertilizer or other household chemicals during rainstorms. Riparian areas also provide critical habitat and shading, which protects fish and other species.
- Development in the floodplain and floodway poses a threat to water quality due to the potential inundation of homes, garages, sheds and businesses that store pesticides, paints, solvents, petroleum products, sewage (from septic tanks and drainfields), gasoline, oil, grease and other petroleum products during periodic floods.
- Development in areas where the river is actively meandering can potentially wash away structures, septic systems, drums, tanks, or other containers that store chemicals. In addition, landowners in meander areas often use revetment to harden river banks to protect homes and other structures that are threatened. This leads to a straightening of the river, with higher water velocities and potential for downstream impacts to other landowners.

Based on results from the University of Oregon CPW study, it appears that Lane County Code and permitting practices can be strengthened to provide greater protection from the health, public safety and other risks described above. The research also indicates that granting variances to enable landowners to build a structure in a sensitive area creates a domino effect whereby additional variances or modifications are subsequently requested to allow expansion of dwellings, decks, garages, etc. This increases County staff time to review applications and creates resource impacts on other agencies.

The rivers in Lane County will continue to experience significant development pressures as a result of being near the growing metropolitan areas of Eugene and Springfield and

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showcasing the stunning beauty that draws people to live along these rivers. Given that some of the predicted future impacts of climate change include more frequent severe weather events (increased flooding and droughts), vegetative changes from disease or infestation, and increased severity and frequency of wild fires, there is a need to take a thoughtful approach on how to manage future development in critical water resource areas. The cost of not addressing these future concerns could be significant if impacts result in the need for increased water treatment for drinking water to handle higher loads of pollutants associated with development along the river and/or increased property damage and potential for loss of life.

### **Floodplain and Riparian Area Activities**

As indicated by these recent studies, the pattern of development in floodplains is posing an increasing threat to public health and safety (drinking water, recreational contact), public and private property, and ecosystems that, if left unaddressed, could result in an unsustainable financial burden on State and County staff, as well as the community (flood risks). Fortunately, a number of agencies and organizations, including County staff, are actively working on issues related to protecting Lane County's critical water resources. These various actions include drinking water source protection, groundwater management areas, fish and wildlife habitat restoration, the Metro Waterways study and project implementation, floodplain restoration, environmental flows studies, conservation easements and land acquisition, Millrace restoration, climate change impact analysis and modeling, and the FEMA Community Rating System, to name a few. At the same time, there are regulatory and legal activities that require attention and a coordinated and collaborative response to insure that their impact on Lane County is minimal. These include TMDLs, State Land Use planning goals 5 and 6, Willamette Basin Biological Opinion Implementation, and the FEMA lawsuit that will require floodplain management to protect threatened and endangered species ([http://online.nwf.org/site/DocServer/FEMA\\_Complaint\\_Press\\_Release\\_June\\_25\\_2009.pdf?docID=10621](http://online.nwf.org/site/DocServer/FEMA_Complaint_Press_Release_June_25_2009.pdf?docID=10621)). Table 1 summarizes some of the activities and regulatory efforts associated with floodplain management and protecting riparian areas.

### **Recommendations on Path Forward**

The strength of watershed councils is bringing diverse partners to the table to help integrate overlapping issues and reach consensus on a path forward. The watershed councils have been working with the Eugene Water & Electric Board (EWEB), University of Oregon (U of O), Springfield Utility Board (SUB), McKenzie River Trust (MRT), Lane Council of Governments (LCOG), Lane County staff, Oregon Department of Fish & Wildlife (ODF&W), Oregon Department of Environmental Quality (DEQ), Oregon Department of Human Services (DHS) and others to gain a better understanding of the multiple and complex issues that relate to development in the floodplain and riparian areas and collect data on the impacts of this type of activity on critical water resources in Lane County. The time is ripe to act strategically by collaborating on these multiple, complex issues.

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We encourage utilizing the current interagency partnerships that exist to provide technical and policy-review support to Lane County, avoid redundant efforts and maximize resource efficiency. We appreciate the County's continued interest and support for this work and want to leverage other community resources to facilitate these efforts. We recommend the following as immediate next steps to protect water quality and mitigate further health and safety risks:

1. Prioritize water quality related items in the upcoming Land Management Division long-range planning work program. Items we believe are vitally important include:
  - Community Rating System (to address FEMA lawsuit and to include floodplain ordinance work)
  - Riparian Ordinances;
  - Protection of surface and groundwater source zones;
  - Channel migration zones;
  - Standing for water providers;
  
2. Utilize our workgroup as a technical advisory committee to County planning staff on relevant water quality related work. Proposed technical committee tasks could include:
  - Coordinating public outreach to solicit input from other stakeholders (ex. property owners, farmers, developers, emergency managers, non-profit agencies, etc.);
  - Gathering data/examples of development issues/impacts throughout the county;
  - Providing technical assistance with updating floodplain maps and/or channel migration zones;
  - Exploring programmatic changes at the incentive and educational level and seeking ways to obtain multiple benefits from proposed solutions;
  - Helping strategize ways to mitigate risks from new legislation and/or lawsuits; and
  - Identifying funding partnerships and legislative support/directive spending to bring more resources to bear.

## **Next Steps**

Following adoption of the Land Management Division long-range workplan, the partners will reconvene to identify how best to align our resources and strengths in support of water quality protection efforts. The committee will also identify any additional areas that it believes are priorities that were not included in the long-range plan, particularly

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those associated with development in the floodplain and riparian areas that address public health and safety concerns. With County approval of this proposal, we hope to schedule a work session in October/November where the technical committee can share a proposed scope of work, including priority topic areas, a timeline for the committee's work, opportunities for check-ins with the Board and/or Planning Commission, and a funding strategy for ordinance development and implementation.

We believe that a technical committee can be an effective asset to the County to help coordinate multiple efforts underway by the partner agencies, bring additional expertise and research to the table, maximize efficiency through collaboration, leverage existing resources, secure adequate funding, broaden stakeholder outreach, and develop a menu of policy options consistent with County leadership direction. Thank you for your time.

Sincerely,

Dana Erickson  
Long Tom Watershed

Larry Six  
McKenzie Watershed

Eve Montanaro  
Middle Fork Willamette Watershed

Liz Vollmer-Buhl  
Siuslaw Watershed

Pam Reber  
Coast Fork Willamette Watershed

# MINUTES

Lane County Planning Commission  
Board of Commissioners Conference Room—125 East 8th Avenue  
Eugene, Oregon

June 2, 2009  
5:30 p.m.

**PRESENT:** Lisa Arkin, Chair; Robert Noble, Vice Chair; Todd Johnston, Tony McCown, Nancy Nichols, Howard Shapiro, Jozef Siekiel-Zdzienicki, John Sullivan, Lane County Planning Commission; Kent Howe, Stephanie Schulz, George Ehlers, Lane County Land Management Division; Karl Morgenstern, Brad Taylor, Eugene Water & Electric Board; David Richey Denise Kalakay, Lane Council of Governments; Nick Kraemer, Cody Evers, Bob Parker, Roger Hamilton, University of Oregon Community Planning Workshop.

**ABSENT:** Steve Dignam, Lane County Planning Commission.

Ms. Arkin convened the work session of the Lane County Planning Commission (LCPC) at 5:30 p.m.

Those present introduced themselves.

## **PUBLIC COMMENT**

There was no one present wishing to offer comment.

## **WORK SESSION**

### **1. Approval of Minutes**

*April 7, 2009*

Mr. Siekiel-Zdzienicki referred to page 2 of the minutes and corrected the first sentence in paragraph 9 to read (italicized text added): “City of Eugene City Attorney Kathryn Brotherton said the West Eugene Parkway (WEP) was different than the other projects on the list and was not being removed because it had *not* been completed.”

Mr. Siekiel-Zdzienicki referred to page 4 of the April 7 minutes and corrected the first sentence in the motion to read (italicized text added, struck text deleted): “. . .moved that the Lane County Planning Commission recommend that the Lane County Board of County Commissioners, rebased on the findings of consistency. . .”

Mr. McCown, seconded by Mr. Siekiel-Zdzienicki, moved to approve the April 7, 2009, minutes as amended. The motion passed unanimously, 8:0.

*April 21, 2009*

Ms. Arkin referred to page 4 of the April 21 minutes and asked that sentence 5 in paragraph 5 be changed to read “She saw ~~not~~ no reason to split the lot. . .” She also asked that sentence 7 in the same paragraph be amended to read “She was *not* troubled about the home since it would be a permitted use. . .”

Mr. Sullivan, seconded by Ms. Nichols, moved to approve the minutes of April 21, 2009, as amended. The motion passed unanimously, 8:0.

*May 5, 2009*

Ms. Nichols referred to page 6 of the May 5 minutes and offered the following correction: “Ms. Nichols understood the State planned to cut back Measure 57 and reduce the number of people incarcerated and *asked* how it impacted Junction City’s plans.”

Mr. McCown, seconded by Mr. Shapiro, moved to approve the minutes of May 5, 2009, as amended. The motion passed unanimously, 8:0.

## **2. McKenzie River Riparian Protection Study**

The commission was joined by Karl Morgenstern and Brad Taylor of the Eugene Water & Electric Board (EWEB); David Richey and Denise Kalakay of the Lane Council of Governments (LCOG), and Bob Parker, Roger Hamilton, Nick Kraemer, and Cody Evers of the University of Oregon’s Community Planning Workshop. Ms. Arkin reminded the commission of the tie between the presentations members would hear and the commission work plan item related to riparian protection.

The presenters provided information on EWEB’s McKenzie River Riparian Study and the Community Planning Workshop’s analysis of the Lane County Development Code. On behalf of EWEB, Mr. Morgenstern presented information on the riparian study. He identified the scope of existing and proposed development, discussed non-point source pollution threats in the McKenzie basin, and described the scope of the McKenzie River Septic System Assistance Project. Commissioners asked questions clarifying the information presented.

Mr. Morgenstern noted that a bill passed in the 2007 Oregon Legislature had provided EWEB with the ability to assist the owners of failing septic systems. Ms. Arkin suggested that Florence could take a similar approach.

Mr. Morgenstern overviewed EWEB’s monitoring efforts in the watershed and shared some summary data that demonstrated the impacts of septic cluster areas. He discussed the septic system inspections conducted by EWEB, which identified 37 systems in need for repair or replacement. He confirmed, in response to a question from Mr. Noble, that age was a factor in

system failure. He shared data on systems inspected and pumped in watershed sub areas and a map showing drinking water source protection areas in Lane County. Mr. Noble asked about compliance and access to properties. Mr. Morgenstern said there was initial skepticism on the part of residents, but since the effort was voluntary it was generally accepted.

Mr. Johnston asked if there were enforcement mechanisms available for failing septic systems. Mr. Morgenstern said yes, but EWEB did not use them. EWEB had used grant money to replace failing systems and was attempting to secure more resources to underwrite the costs of more system testing and replacement. He confirmed, in response to a question from Ms. Nichols, that many residents had been willing to replace their own systems without assistance as they realized it was part of their investments in their homes. He noted that sampling had occurred in the dry season but sampling was also planned for fall 2009.

Mr. Parker provided an overview of the Community Planning Workshop's analysis of the Lane County Development Code as it affected drinking water in the McKenzie basin. He described the historical development patterns in the basin and briefly overviewed the permit review methodology using some actual examples. He noted the high level of development in the flood zone and flood plain. He shared data about some of the variance requests received by Lane County over the last two years.

Mr. Parker concluded his presentation by sharing some summary analysis results, suggesting that the code and permitting practices allowed and in some cases encouraged development in riparian areas and flood zones, resulting in threats to water quality, habitat, and structures, as well as increased staff time and cost for permit reviews, and which also had a domino effect that resulted in additional permit applications to address other regulatory issues and more variance requests. A single property could have been the subject of between 15 to 30 permit applications.

Responding to a question from Mr. Siekiel-Zdzienicki regarding permitting modifications that could have been avoided, Mr. Parker suggested that the question was how to mitigate the impact of existing development and the impacts of new development, such as land parcelization. He noted that Hood River, Oregon, prevented the creation of a lot that required a modification to the setback requirement for hardship purposes.

Mr. Morgenstern discussed some of the implications and long-term trends based on climate warming trends that he anticipated would result in wetter winters and drier summers. He shared digital elevation models of the basin to demonstrate improved mapping and noted other water quality projects currently underway. He distributed a list of those projects.

Mr. Morgenstern reviewed next steps in the process, which included securing standing for EWEB in development processes and a request to the Board of County Commissioners to establish committees to review the County's development code.

Responding to a question from Mr. Sullivan, Mr. Howe said a code review was no longer on the staff work plan, but could be added if the commission and Board of County Commissioners chose to raise it in priority.

Mr. Sullivan suggested the commission recommend to the Board of County Commissioners that it hear the presentation due to the importance of the McKenzie River as a community water source. Mr. Howe concurred, and suggested that the commission also give staff an opportunity to provide its perspective as well.

Ms. Arkin suggested that the PowerPoint presentations be attached to the minutes.

Mr. Sullivan suggested that staff include a timeline in the project to focus the Board of County Commissioners' discussion.

Mr. Shapiro wanted the timeline to be associated with the severity of the problem. Mr. Parker said the analysis focus was on preserving water quality in the basin. He said there was evidence that development had an impact on water quality, and the question was how much more development it would take to create problems that interfered with EWEB and the fish habitat. Mr. Parker suggested that if the community relied on state and federal standards to protect the river, "it was already gone at that point." He said the river supplied both drinking water to EWEB customers and was a world class fishery, lending urgency to the analysis. Mr. Parker did not see regulatory avenues that would stop development because of the rights of development that existed, but he thought there were best practices that were worth having discussion about at the commission level. He suggested a combination of regulatory and incentive-based programs might be the ultimate solution. Mr. Shapiro asked that the presenters come back for more discussion.

Ms. Arkin asked how property owners secured permission to place revetment in the river. Mr. Howe said that below the ordinary high water mark, the Division of State Lands (DSL) regulated the issue and permitted revetment, and if the property was above the ordinary high water, the property owner must seek a modification to the riparian setback requirement. That process could possibly also involve the DSL depending on the location of the property. Mr. Howe reviewed the Lane County process and said it was not an easy thing to do. Mr. Morgenstern asserted that he was seeing a lot of emergency revetment placed with the intention to save houses, and those permits are approved fairly quickly. The property owner was supposed to follow up and "close the deal" but he did not know how often that actually happened.

Ms. Arkin said Senate Bill 77 required the DEQ to develop a list of bio-accumulative toxins that existed in the state's surface water. She said the list was released the day before, and the DEQ had identified 140 persistent cumulative pollutants. She said the problem was a statewide problem involving several State agencies, and was not just a local problem.

Responding to a question from Mr. Johnston, Mr. Morgenstern indicated he would let the commission know when materials were available on line.

Responding to a question from Ms. Nichols, Mr. Howe said that Lane County processed each application for modification on its merits and referrals were sent to the appropriate State agencies, to EWEB, and to surrounding property owners for comment. Staff weighed the setback issues and property rights. The County attempted first to protect the riparian zone but sometimes life safety issues and road locations played a role. Mr. Sullivan applauded the fact the process was not prescriptive. Ms. Nichols asked if the County could reduce building size. Mr. Howe

said that touched on the criteria. In regard to the issue of a variance versus modification, a modification for the riparian zone was based on a practical difficulty test, which was different from the test for a variance, which is based on an analysis for an unduly restrictive burden. The Board has made it clear to staff that there was a balancing act involved. The County noticed its final decision on proposals to all surrounding properties and involved agencies and gave those parties an opportunity to appeal. Mr. Howe conceded that the ordinance was not perfect but it attempted to strike a balance between private property rights and the public's interest. He indicated he would provide more context regarding the issue to the commission in the future.

Ms. Arkin said she recently heard a presentation from Gordon Grant of Oregon State University regarding water quantity and recommended that he be invited to present to the commission as well.

Ms. Arkin thanked Mr. Parker and Mr. Morgenstern.

### **3. Climate Leadership Initiative**

Mr. Hamilton presented a PowerPoint presentation on the initiative entitled *Framework for Futures Project*, which provided an overview of the effect of climate change on the water supply in Oregon, with a focus on Oregon waterways. Commissioners asked questions clarifying the information presented.

Mr. Sullivan noted Representative Peter DeFazio's opposition to decommissioning dams. He asked if the presentation supported decommissioning dams. Mr. Hamilton said that the question was not easy to answer with a yes or no. He noted the recent decommissioning agreement reached in regard to the Klamath Basin area and the relatively small megawatts involved that suggested the agreement was not going to be significant in regard to power production. He believed that the harm to the fish from water releases heavy with algae during the summer months was justification for decommissioning. Mr. Sullivan recalled that Representative DeFazio had discussed his views on the radio and had presented several logical reasons for his position. He wanted to hear more about those views and raised the issue because of the fact of the two dams on the McKenzie River and Representative DeFazio's position that decommissioning the dams would have more impact on the fishery than the project changes made by the Army Corps of Engineers within the last ten years.

Ms. Arkin observed that studies indicated a growing number of pharmaceutical drugs were entering the water through septic and sewer systems.

Mr. Noble referred to the data Mr. Hamilton presented that showed a drop in snow pack and asked if the analysis included an assumption of a higher average temperature that caused that drop. Mr. Hamilton said that the temperature was assumed to go up by five to ten degrees by the end of the century, depending on the elevation and latitude; the global average was two to four degrees hotter.

Ms. Arkin thanked Mr. Hamilton for his presentation.

#### **4. Report**

Mr. Noble indicated his intent to bring the commission information at its June 16 meeting about possible revenue options for long-range planning and planning commission support. Mr. Howe updated the commission on the budget actions taken by the Board of County Commissioners to direct tipping fee revenues to Land Management. The commission agreed it still wanted to have the discussion of revenues identified by Mr. Noble.

Responding to a question from Mr. Noble, Mr. Howe indicated he would prepare one of his periodic summaries of the results of the commission's recommendations to the Board of County Commissioners.

Mr. Noble reported that the Board of County Commissioners asked the chair and vice chair to report quarterly in person.

Ms. Arkin adjourned the meeting at 8 p.m.

*(Recorded by Kimberly Young)*

