

**Final DRAFT- April 11, 2002**  
***McKenzie Watershed Council***  
**McKenzie Watershed Benchmark System**

**Vision:** Describes the Council's desired future for the watershed for fish and wildlife habitat, water quality, education, outreach, collaboration and partnerships among interests.

***Through the McKenzie Watershed Council's Conservation Strategy, the McKenzie River Watershed supports exceptional water quality and habitats in balance with human economic livelihood and quality of life.***

**Mission of the McKenzie Watershed Council** (Council's responsibility to attain the vision):

***..to foster better stewardship of the McKenzie Watershed resources through voluntary partnerships and collaboration...***

**Goals:** The *Conservation Strategy* has five goals that help achieve the vision.

**Strategies:** Specific actions designed to achieve the goals.

**Statement of Desired Conditions:** Describes the future environmental and/or organizational conditions achieved through the implementation of the strategies.

**Benchmarks:** Specific values (or target) for an Indicator (below) set at a particular future point in time (2020) that shows progress towards reaching the desired condition identified herein. Current values for the Indicators are calculated from 2000 information contained in the Assessment and form the basis for measuring progress toward the Benchmarks in the out-years. The Council will produce a *State of the Watershed* report in 2010 evaluating the status of the watershed emphasizing this Benchmark system. Please note that there is both near-term (2010) and long-term (2020) check-in points when progress towards the Benchmarks will be evaluated.

**Indicator:** Measurement Unit of where and when to measure.

The council considers these as:

- Reference points for goal setting.
- Tools for setting priorities and allocating resources.
- Yardsticks for measuring watershed health and council performance.
- Tools for seeking partner cooperation on broad issues.
- Tools for assessing the gap between existing and desired conditions.

- Learning and educational tools.

### **Definitions of key terms**

**Protection:** Maintaining high quality natural habitats and related biological, chemical, and physical processes in an ecosystem. Management actions that may be necessary to maintain natural functions and characteristics. (Adapted from Kauffman et al., 1997. *An Ecological Perspective of Riparian and Stream Restoration in the Western United States*. Fisheries: 22). See Goal III for methods of protection.

The Council emphasizes protection in areas of the watershed with high quality habitats. Protection of areas and ecological functions that are at present relatively productive for fish and wildlife populations will provide a base for expansion of healthy populations as the Council restores degraded habitats in other areas.

### **Restoration:**

- (1) Reestablishment of riparian, stream or other habitat functions and related biological, chemical, and physical processes in an ecosystem, this includes reestablishing connectivity of habitats.
- (2) Actions taken to move a habitat type modified through human actions closer to its original function. (Adapted from Glossary of Aquatic Habitat Inventory Terminology, American Fisheries Society, 1998). See Goal III for methods.

The Council emphasizes restoration in areas where natural processes once created the best habitats and there has been a loss in quality and/or amount. It is recognized that habitats will be restored and then protected where possible.

## **PROPOSED BENCHMARKS**

### **Goal I: Promote Community Understanding and Stewardship through Outreach and Education**

#### **Statement of desired condition:**

- McKenzie Watershed residents, students, teachers, organizations, and user groups have knowledge about Council activities and key issues related to the health of the watershed and participate in monitoring and habitat improvement efforts. The above interests understand how their actions and efforts contribute to the quality of the watershed's environment.

**Goal I continued: Promote Community Understanding and Stewardship through Outreach and Education**

BENCHMARK	INDICATORS
<p>By 2020 (long-term), 80 percent of the McKenzie Watershed residents, organizations, students and teachers, and user groups are aware of the Council and its actions and understand important watershed issues and stewardship actions. The above interests actively participate in monitoring and habitat improvement efforts and understand how their actions contribute towards a healthy watershed.</p> <p>By 2010 (short-term) 60 percent of the McKenzie Watershed residents, organizations, students and teachers, and user groups are aware of the Council and its actions and understand important watershed issues and stewardship actions. The above interests actively participate in monitoring and habitat improvement efforts and understand how their actions contribute towards a healthy watershed.</p> <p>Elementary Students and Teachers within the McKenzie Watershed gain awareness of what a watershed is, how it functions, and what the key issues are. Secondary Students and teachers within the McKenzie Watershed understand the function of a watershed, and how their actions effect a watershed, and participate in watershed monitoring and habitat restoration efforts.</p>	<ol style="list-style-type: none"> <li>1) Number of individuals attending Council meetings and other Council educational activities.</li> <li>2) Number of presentations given by Council Staff, Council Volunteers and Partners to organizations, user groups, and classrooms.</li> <li>3) Number and hours of residents, students, teachers, organizations, and user groups devoted to participating in Council projects.</li> <li>4) Number of households and organizations receiving Council information (newsletters and other materials).</li> <li>5) Percentage of surveyed watershed residents and other stakeholders who express an understanding of watershed issues, stewardship actions, and Council activities.</li> <li>6) Assessment and needs survey results of teachers and school district programs that teach about watershed education in Elementary and Secondary schools throughout the watershed.</li> </ol>

**Goal II: Promote Partnerships to Support Local Stewardship Actions**

**Statement of desired conditions:**

- Community-wide stewardship actions focus on restoring and protecting key fish and wildlife habitats and addressing water quality concerns. The Council and partner organizations provide information, technical advice, and assist in obtaining funding to support watershed stewardship efforts for all Community Conservation Areas, (for example Cedar Creek and the Mohawk Partnership), organizations, and individuals wishing to engage in voluntary actions.
  
- Collaboration with Council partners and other organizations supports: 1) coordinated watershed-wide habitat restoration and protection; 2) an integrated monitoring and research effort that targets key issues; 3) fostering community understanding and stewardship actions; and 4) management of a coordinated and comprehensive volunteer workforce program to support watershed/community stewardship efforts.

BENCHMARKS	INDICATORS
<p>By 2020 funding and technical support for Community Conservation Area groups and individuals asking for assistance for watershed stewardship actions is provided where possible. Community Conservation Area Action Plans are developed for all of the <i>Conservation Strategy</i> Community Focus Areas by 2020.</p> <p>By 2010 Community Conservation Area groups are formed in all the <i>Conservation Strategy</i> community focus areas with at least 4 local Action Plans developed.</p>	<p>1) Number of active and supported Community Conservation Area groups engaged in watershed stewardship that restores and protects habitat.</p> <p>2) Number of individuals assisted with stewardship actions that restores and protects habitat.</p> <p>3) Number of developed action plans moving toward restoring and protecting habitat.</p> <p>4) Number of individuals and hours devoted to participating in Council projects.</p> <p>5) Amount and diversity of funds (cash and in-kind) raised to support watershed restoration and protection efforts.</p>

### **Goal III: Protect and Restore Key Fish and Wildlife Habitats**

#### **Statement of desired conditions:**

A network of high quality fish and wildlife habitats in the lower McKenzie watershed are protected and restored (please see definitions above for Protection and Restoration).

- These habitats will provide broad benefits to multiple species and different life-history stages (rearing, migration, and etc.) and contribute to protecting water quality and other ecological functions.
- Connections between terrestrial and aquatic habitats in the McKenzie River Watershed provide for the movement of aquatic life and terrestrial wildlife across the landscape, benefitting fish and wildlife populations and reducing the number of isolated populations.
- Agreements with landowners will help assure that key habitats targeted for restoration and protection are maintained through time, with an emphasis on utilizing programs that reasonably ensure long-term protection.

**Habitat restoration and protection concentrates on these key habitats and processes:**

- River and stream habitats and their connectivity
- Floodplain and riparian vegetation and their connectivity
- Wetlands
- Pond habitat (e.g., habitat that supports Pond Turtles)
- Upland habitats (i.e., oak woodlands, native prairie grasslands)

**Goal III continued: Protect and Restore Key Fish and Wildlife Habitats**

BENCHMARK	INDICATOR
<p>By 2020 the Council and partner organizations will implement 20 landowner agreements focused on <b>protection</b> (see methods below).</p> <p>By 2020 the Council and partner organizations will implement 160 <b>restoration</b> projects (see methods below) targeting the five key habitat types above.</p> <p>By 2010 there will be a net increase in the area of private lands <b>protected and restored</b> in the Lower McKenzie watershed.</p> <p>By 2010, Council and partner organizations will implement 60 <b>restoration</b> projects focused on the five key habitats and habitat connections.</p> <p><b>Methods for protection:</b> 1) Title of land transferred to land conservancy or government agency with the primary objective of conservation; areas in fees simple purchase, remainder interests, areas in conservation easements, acquisition, Conservation Reserve Enhancement Program, or other programs with conservation objectives. 2) The area meets project objectives to sustain ecological processes and there is ongoing maintenance.</p> <p><b>Methods for restoration:</b> 1) The area meets the project's restoration objectives for sustaining ecological/physical processes based on project effectiveness monitoring.</p> <p><b>Project Selection:</b> To ensure the quality of restoration projects, the McKenzie Watershed Council IDT (Inter-disciplinary Team) will evaluate the relative and individual merit of each project before proceeding with a particular project.</p>	<p>1) Acres of land area protected by habitat type.</p> <p>2) A net positive increase in key habitat types (baseline 2000 Subbasin Assessment)</p> <p>3) Number of quality projects completed.</p> <p>4) Number of aquatic passage barriers replaced.</p> <p>5) Estimate of the length/acres of aquatic habitat reconnected.</p> <p>6) Length/acres of key riparian, aquatic, and terrestrial habitats restored.</p> <p><b>Baseline data:</b> 2000 McKenzie Subbasin Assessment, McKenzie Watershed Council data, McKenzie River Trust information, and aquatic passage inventory project reporting.</p>

**Goal IV: Protect and Restore Water Quality and Quantity**

**Note:** It is assumed that habitat protection and restoration actions will have a net benefit for water quality and quantity.

**Note:** This goal focuses on the continuation and establishing new efforts to monitor water quality throughout the watershed. The Council and partner organizations will monitor water quality under the Council’s Three-Tiered approach that includes: ambient, storm-event, and tributary specific monitoring programs. For example, Eugene Water and Electric Board will be conducting storm-event monitoring in future years.

**Note:** Water quality monitoring also includes sampling efforts for macroinvertebrates.

**Statement of desired conditions:**

- The McKenzie River continues to support high water quality as measured by the Department of Environmental Quality’s Oregon Water Quality Index. Where degraded, water quality will improve in tributary streams and mainstem.
- The Council and partner organizations engage in targeted monitoring and assessment that address gaps in information on the status of water quality and quantity in the McKenzie River Watershed. Where water quality concerns have been identified, adaptive management strategies and education are utilized to make corrections. The monitoring effort concentrates on lower McKenzie River Valley mainstem and tributary streams.
- The Council works with agencies, resource entities, private businesses and landowners to enhance or restore natural stream flows and the natural physical characteristics of these flows. Methods include negotiations, water right purchases, and habitat restoration projects aimed at achieving natural flow dynamics in the McKenzie River watershed. Note: the Council recognizes that numerous regulatory entities are in place concerning water quantity and water withdrawal; the Council sphere of influence is advisory.

BENCHMARKS	INDICATORS
<p>By 2020, the monitoring program continues to report on the status of water quality in the McKenzie River Watershed and there is no decline in the Oregon Water Quality Index.</p> <p>By 2010, the monitoring program provides a report on water quality status in the <i>State of the Watershed Report</i>. The Oregon Water Quality Index continues to be evaluated and there is no decline in the index values.</p>	<ol style="list-style-type: none"> <li>1) Water quality reports produced by the Department of Environmental Quality and Council.</li> <li>2) Ongoing water quality monitoring partnerships developed with local groups and other organizations.</li> <li>3) Oregon Water Quality Index values as reported by Department of Environmental Quality.</li> <li>4) Water pollution loads determined and decreasing.</li> <li>5) Water rights secured in water trusts.</li> </ol>

**Goal V: Council Accounts For and Provides Investments in the Watershed**  
**Statement of desired conditions:**

- The Council has the ability to understand the implementation effectiveness of the *Conservation Strategy* Goals. Evaluation of the *Strategy's* effectiveness provides sufficient information to adjust work plans to meet deficiencies in the approach.
- The Council has a comprehensive system for tracking the details of project implementation, project monitoring and evaluating progress toward meeting the benchmarks. *It is anticipated that data entered into the database will include only information where the Council is the implementor or is in partnership on a project.* Partnership is defined as Council providing money, seeking grants, bringing coordination or organizational efforts to the project, and/or providing technical skills in support of the project.
- The Council provides annual reports on implementation and effectiveness of the *Conservation Strategy* and 5-year reports on the state of the watershed's resources to watershed interests and funding organizations.
- The Council use watershed restoration as an economic development opportunity for the communities, businesses and interested people in the watershed. This includes establishing economic relationships with purchases from plant nurseries, hiring skilled contractors, and other professional people to conduct restoration work.

BENCHMARKS	INDICATORS
<p>By 2020, the Council is monitoring and reporting on all Council actions related to the implementation of the <i>Conservation Strategy</i>.</p> <p>By 2010 the Council is using a comprehensive database, including a Geographic Information System, for tracking of benchmarks, monitoring individual projects, and is reporting on whether actions are achieving the goals and actions of the <i>Conservation Strategy</i>.</p> <p>On an annually basis the majority of watershed restoration funds the Council receives are spent in the watershed.</p>	<ol style="list-style-type: none"> <li>1) The number of benchmarks successfully tracked.</li> <li>2) The ability to answer database queries, including displaying project locations &amp; characteristics.</li> <li>3) Annual reports.</li> <li>4) 2010 first release of state of the watershed report.</li> <li>5) Number of contractors annually hired from within the watershed.</li> <li>6) Amount of supplies purchased annually from within the watershed.</li> </ol>

**Final Draft Benchmarks - April 11, 2002**

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