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May is American Wetlands Month

American Wetlands Month, recognized each May, is a great time to celebrate the many ways wetlands sustain and enrich our lives. Individuals, schools, and organizations throughout the country explore these watery wonderlands, organize field trips, and even restore or build nearby wetlands---all the while taking part in the national effort to encourage awareness and voluntary wetland conservation efforts.

EPA invites you to take part, as well. The Terrene Institute, in partnership with EPA and others, offers materials that can support your efforts. Terrene can be reached at 703/548-5473 or on the web at www.terrene.org/ wetlands.htm. EPA Region 10 also offers several free publications and other resources related to wetlands. A partial list is below. To learn more about what's available call our Public Environmental Resource Center at

Some Wetlands Materials Available from EPA:

206/553-1200 or 1-800-424-4EPA.

Wetland Walk Manual: A Guidebook for Citizen Participation

Protecting Our Wetlands and Other Aquatic Resources: A Guide to EPA's Role in Alaska, Idaho, Oregon, and Washing-

America's Wetlands: Our Vital Link Between Land and Water

SEPA NEWS

EPA Supports Washington Forest and Fish Report

Phil Millam, Special Assistant to Regional Administrator

EPA supports the agreement concerning the Forest and Fish Report (formerly known as Timber, Fish,



and Wildlife or the Forestry Module) recently reached among

state agencies, timber interests, federal agencies, counties, and some tribes. You may have read criticisms of the agreement, especially from the environmental community, which left the negotiations. We would like to explain why EPA maintains its support despite some legitimate concerns about the agreement.

Briefly, the agreement increases riparian buffers, inventories and upgrades forest roads, further restricts logging on unstable slopes, beefs up enforcement, and improves the research and adaptive management provisions of the forest practices regulatory scheme in the State of Washington. Additionally, the agreement provides for compensation for small landowners. The agreement applies to private and state lands in the State of Washington that are regulated by the State Forest Practices Act, or more than 10 million acres.

So why does EPA support such a controversial agreement? In a word--action. Instead of litigating and arguing about whose science is "right," something will happen on the ground that will greatly improve how forest practices are conducted in the State of Washington. We know that our position is not popular with some people and groups. We do agree that the Forest and Fish Report is all about risk to fish, and we do not contend that the agreement fully protects fish in forested lands, especially in the short term. And yes, there are ways that the risk to fish could have been

reduced even further. But our assessment is that such a lowrisk proposal had no chance of being implemented given the politics of the state and the concerns of landowners. Clearly, this is not a scientific judgement, but a political and economic one. One lesson we have learned is that it is much easier to stop something than it is to make something happen. And no agreement would mean the continuation of the status quo regulations, which everyone agrees are inadequate.

Given our acknowledgment that political and economic judgments crept into our decision making, the next question we are often asked is whether the agreement is just a pragmatic political solution that ignored the science of fish. Our answer is a resounding "no." Good science was the driver for the substance of the agreement, but we found that good scientists on both sides of the issue (chiefly the size of the riparian buffer needed) could make credible arguments to support their positions. There was no scientific consensus on all issues. Given this uncertainty, we fashioned an agreement that relies heavily on research and what is known as adaptive management. In other words, get on the ground improvement on those things we do agree upon, and rely on research and monitoring data to tell us if we need to strengthen (or even weaken) the management plans when the information is available. EPA is convinced that the adaptive management plan will provide us the ability to justify tightening regulations in the future, if that proves necessary. EPA is equally convinced that

waiting for scientific consensus would mean that trees would continue to be cut too close to streams, and that roads would continue to need critical repairs.

Final acceptance of the agreement will depend on legislation now pending, future regulations, funds (both state and federal), and above all, the will to make the agreement work. EPA intends to continue its involvement as the agreement is implemented. If we see backpedaling in the funding, enforcement, or commitment to research and adaptive management, we will withdraw from the agreement. Our hope and expectation is that all parties will come together to make the agreement work for the benefit of fish and water quality. For more information, call Phil Millam, Special Assistant to Regional Administrator, at 206/553-0422 or 1-800-424-EPA x0422.

EPA Region 10 Establishes Office of Civil Rights, Environmental Justice

EPA Region 10 recently established an Office of Civil Rights and Environmental Justice. The new office was created to elevate the visibility of these significant programs and help advance and integrate them in





EPA Region 10. In November 1998, Regional Administrator Chuck Clarke, after conducting a nation-wide search, selected Joyce Kelly as Director.

The primary goals of the new office are to help Region 10 improve accountability, communication, and coordination among programs related to civil rights and environmental justice. The office will be responsible for programs related to the civil rights compliance of EPA grantees, the civil rights of job applicants and employees, and efforts to ensure that Environmental Justice (EJ) target communities receive equitable protection under environmental laws. Office responsibility areas are:

- The Equal Employment Opportunity Program, including complaints of discrimination, affirmative employment, special emphasis programs and implementation of the Diversity Action Plan. This Plan addresses Region 10 recruitment, hiring, promotions, awards, assignments, training and organizational culture.
- Environmental Justice, including work to make EJ an integral part of the day-to-day activities of EPA employees, and the work of other federal, state, and local govern ments.
 The Office will also serve as a focal point to ensure that EJ target communi ties receive fair protection under environmental laws and have increased EPA access.
- EPA grantees' civil rights compliance, which refers to the obligation of EPA grantees and contractors to comply with applicable civil rights law, such as Title VI of the 1964 Civil Rights Act.
- Minority and Women Business Enterprise Program and work to ensure that recipients of EPA financial assistance award a fair share of contracts and procurements to small, minority, and women's businesses.

For more information on the Office for Civil Rights and Environmental Justice call 1-800-424-4372 or 206/553-4029. Joyce Kelly's email address is kelly.joyce@epa.gov.

Anniversary Report Highlights Progress, Next Steps

Hot off the presses is a report entitled Clean Water Action Plan: The First Year. The Future. The 20-page report celebrates the first anniversary of the Clean Water Action Plan and outlines an agenda for the coming year. The Action Plan is a far-reaching and innovative plan that unites the efforts of

EPA Offers To Assess "Brownfields" Sites

EPA's Seattle Office is now offering a select number of environmental site assessments to public or non-profit entities interested in redeveloping *brownfields*---abandoned or underutilized properties where development is complicated by contamination. Under the agency's Brownfields program, environmental consultants contracted by EPA will perform the environmental assessments -- valued up to \$50,000 -- to determine the nature and extent of contamination, and, if requested, to estimate the costs of cleaning up the site for redevelopment.

These assessments are available to public, quasi-public, or non-profit entities, such as municipalities, tribal governments, and community development corporations. In order to qualify for Brownfields assessments, the property must be contaminated or suspected to be contaminated with hazardous substances. EPA's selection process will be aimed at projects where a party has concrete redevelopment plans for the site once the assessment is complete.

EPA will generally approve expenditures for Brownfields assessments when the property is publically held. If a public or non-profit entity is aware of a Brownfields site that is privately held but has potential for redevelopment that will offer significant public benefit, EPA will consider spending funds at the site. To apply for the program, or for more information, contact Joanne LaBaw at 206/553-2594, 1-800-424-4EPA x2594, or e-mail at labaw.joanne@epagov.epa.mail.



Clean Water Action Plan Update

citizens, business, and government in protecting and restoring our water resources. Since the Action Plan was released in February 1998, federal agencies have been working with stakeholders to implement its 111 key actions and build a framework for watershed protection in the 21st century.

According to the Anniversary Report, one of the greatest successes of the Action Plan is that it has brought people together in a true spirit of cooperation to protect rivers, lakes, coastal waters, and wetlands. The Action Plan also has produced a resurgence of local participation. Accomplishments include the first national assessment of watershed conditions and priorities, a strategy for animal feeding operations, an emergency plan to coordinate federal response to harmful algal blooms, and the first national Internet listing of beach water quality conditions. The agenda for the coming year includes protecting watersheds, improving information communicated to citizens, addressing polluted runoff, enhancing natural resources stewardship, and protecting public health.

To see the Anniversary Report visit www.cleanwater.gov/anniv or call EPA's Public Environmental Resource Center for a free copy at 206/553-1200 or 1-800-424-4EPA. To learn more about EPA Region 10 activities related to water, visit www.epa.gov/r10earth/index.htm and click on "water."

Watershed Restoration Action Strategies Smart Way to Set Priorities

The Clean Water Action Plan encourages states and tribes to develop **Watershed Restoration Action Strategies** for watersheds identified as having the greatest need for restoration. Action Strategies can be a smarter, more effective, and less costly way to achieve pollution reduction goals. The strategies spell out causes of pollution, list actions parties must take, and set milestones for measuring progress. Unlike other plans, Watershed Restoration Action Strategies provide a comprehensive look at existing plans, identify gaps in those plans, and specify immediate actions to begin the recovery process. Development of these strategies is an opportunity to identify and demonstrate innovative approaches to restoring water quality and protecting public health and the environment.

As described in the November 1998 issue of WaterTalk, Watershed Restoration Action Strategies are developed based on Unified Watershed Assessments, which highlight geographic areas plagued by multiple problems. All four states in Region 10--Alaska, Idaho, Oregon, and Washington--and nine tribes have submitted Unified Watershed Assessments. Three tribes have submitted drafts. With Unified Watershed Assessments in place, states and tribes are now poised to create Watershed Restoration Action Strategies.

To implement Watershed Restoration Action Strategies, federal agencies are providing significant resources, including \$100 million appropriated nationally for polluted runoff controls. Because Action Strategies provide the blueprint for spending funds, EPA Region 10 will be looking for strategies that describe realistic projects, address critical problems, and indicate strong potential for success.

To learn more about Watershed Restoration Action Strategies, contact Mark Hersh at 206/553-2143, 1-800-424-4EPA x2143, or hersh.mark@epa.gov. Or, visit www.epa.gov/r10earth/index.htm and click on "water." CWAP Update Continued...

Beach Action Plan Released

EPA's **Action Plan for Beaches and Recreational Waters** is now available. This Beach Action Plan seeks to reduce risks to recreational water users through improved water quality programs, risk communication, and scientific advances. The Beach Action Plan outlines EPA's activities to accomplish two primary objectives: enabling consistent management of recreational water quality programs and improving the science that supports recreational water monitoring programs. The Plan is a key action under the Clean Water Action Plan. For a copy of the Beach Action Plan, visit www.epa.gov/ORD/WebPubs/beaches/ on the

Internet.

Index of Watershed Indicators Upgraded

EPA recently released Index of Watershed Indicators Version **1.3**. This new version updates six of the original fifteen indicators and adds atmospheric deposition estimates for Total Nitrogen as a data layer. The Index is a compilation of information on the health of aquatid resources in the United States that looks at a variety of indicators that point to whether rivers, lakes, streams, wetlands and coastal areas are healthy and whether activities on the surrounding lands that affect our waters are placing them at risk. The upgrade is a key action of the Clean Water Action Plan. To use the Index of Watershed Indicators, go to www.epa.gov/ surf/iwi/ on the Internet.

Seafood Processing Regulation In Alaska: Partnership to Protect Water Quality

Here is an update on the progressive efforts of EPA and its partners to manage pollution from the Alaskan seafood processing industry and help protect water quality and habitat.

The complexities and consequences of seafood processing in Alaska recently highlighted to EPA the need for a comprehensive pollution management strategy. In Alaska, seafood processing is one of the largest industries and one of the largest producers of pollutants. More than 300 onshore and floating processors discharge roughly two million tons (four billion pounds) of seafood wastes into coastal waters each year. This measures approximately 7,000 pounds per person per year, significantly impacting the environment.

While seafood processors have been regulated under EPA's National Pollutant Discharge Elimination System (NPDES) permits since 1981, the expansion of the seafood industry led to the expansion of the floating processor fleet, the growth of certain onshore facilities, and a six-fold increase in pollutant discharges. Some underwater waste piles increased from an acre to over ten acres and forty feet high alongside some facilities. Coastal waters receiving seafood processing wastewaters experienced decreases in oxygen levels as bacteria decomposed vast quantities of organic material.

Thus, EPA spearheaded a participatory process to develop a strategy with a wide variety of organizations: the seafood industry, Alaska Department of Environmental Conservation (ADEC), Trustees for Alaska, Sierra Club Legal Defense Fund, National Marine Fisheries Service, U.S. Fish and Wildlife Service, National Park Service, Alaska Department of Fish and Game, and Alaska Division of Governmental Coordination.

As part of the overall strategy, one general seafood permit issued by EPA Region 10 covers over 200 facilities which discharge in Alaska coastal waters. Other general permits regulate processors in Kodiak and in the Pribilof Islands. The permits imposes limits on pollutants and require best management practices and self-monitoring of permitted facilities. EPA inspects facilities for compliance and issues enforcement actions for violations. ADEC supports NPDES permits through its review, consultation, and certification of NPDES permits and inspections of facilities.

In addition, processors who want to discharge pollutants within certain areas that fit under specific categories are required to provide information for EPA to evaluate in order to determine whether they can be permitted to discharge. These areas include impaired water bodies, and special categories such as National Parks and monuments, protected habitats, and special resource waters.

In addition to issuance and enforcement of permits for processing facilities, the strategy also addresses completing pollution reduction allocations for water quality improvement, conducting intergovernmental coordination, and involving the public. For more information, contact Burney Hill at 206/553-1761, or Florence Carroll at 206/553-1760, or 1-800-424-4EPA.

EPA Examines Coeur d'Alene Basin

EPA would like to take this opportunity to tell you about the work we are currently doing in the Coeur d'Alene Basin in Idaho. Recently, a significant amount of sampling and analysis has taken place in the Basin targeted at helping to protect the environment and human health. EPA's goal is to use the Coeur d'Alene Basin investigation to help bring diverse interests together to join forces in creating a comprehensive, community-based cleanup plan.

Background

The 21-square mile Bunker Hill Study Area in Northern Idaho, also referred to as the Bunker Hill "Box," was contaminated by many years of mining and smelting operations. Mining began in the late 1800's and smelting operations followed in the early 1900's. Lead, arsenic, cadmium, and zinc are the main contaminants at Bunker Hill. "Tailings" are materials left over from mining and milling processes. Some mine tailings were discharged to area flood plains, some were discharged directly into the river, and

others placed in holding areas built to prevent tailings from washing into the South Fork of the Coeur d'Alene River. As the river changed course, the tailings from upstream moved throughout the valley floor.

Bunker Hill became a Superfund site in 1983 in response to human health and environmental concerns. EPA chose to focus its efforts on the Bunker Hill "Box," where the greatest and most immediate environmental and health threats are found. Cleanup here is moving ahead successfully and rapidly.

In February 1998, EPA began to investigate contamination caused by mining and minerelated activities beyond the Bunker Hill "Box" into other parts of the Coeur d'Alene Basin. This is the first step toward selecting appropriate cleanup actions. EPA will perform cleanups in areas where contamination is found that poses a risk to the environment or human health.

EPA has been working closely with local officials to ensure they are informed of the results of sampling efforts. In late 1998, EPA was glad to report that all but two Lake Coeur d'Alene beaches tested below EPA's levels of concern for lead and other metals and will not require future cleanup. In early 1999, EPA reported results of sampling conducted at publicly used areas (campgrounds, boat launches, parks, school yards) along the Coeur d'Alene River. This sampling effort did reveal lead at levels of concern in many of the areas sampled. Two public meetings were held to announce results and discuss concerns. Although the news was not positive, most members of the public understood the need to inform people of the contamination and to take action in some areas in order to protect public health.

As the study continues, EPA and the State of Idaho will continue to conduct site-specific cleanup actions, where appropriate, and will continue to support similar ongoing efforts conducted by other parties.

How You Can Get Involved EPA issued a draft Community Involvement Plan for the Coeur

d'Alene Basin investigation late in 1998, and expects to complete a final draft by late April 1999. EPA is beginning to work with an existing citizens' advisory committee with the intent of forming a citizens' task force. This would be a key vehicle for citizen involvement on Basin issues. EPA has also been regularly meeting with local citizens and elected officials, the State of Idaho, the Coeur d'Alene Tribe, and federal Trustees to coordinate our community involvement efforts with those important stakeholders. EPA is also coordinating its outreach efforts with the Governor's Coeur d'Alene River Basin Commission and the federal trustees. For more information or a copy of the Community Involvement Plan, contact Marianne Deppman at 206/553-1237, 1-800-424-4EPA x1237, or email

The McCoy Meadow Model: Restoration Projects for Functioning Watersheds

deppman.marianne@epa.gov.

Many Pacific Northwest watersheds have been severely impacted with respect to fish, water quality,wetlands, and other natural resources. Restoring degraded watersheds typically requires years and substantial funding, as well as changes in land practices. Preventing degradation of functioning ecosystems is by far the most cost-effective way to protect many natural resources. But when past practices have already led to severe problems, major restoration efforts are sometimes needed. A key to conducting these efforts is mimicking the natural system as much as possible. One such effort is a group of projects in the McCoy Watershed of the Grande Ronde Basin in northeastern Oregon. A watershed of almost 57 square miles, the upper portion is National Forest, and the lower portion is comprised of several private ranches.

The largest of the restoration projects to date is improvement of McCoy Creek and its floodplain meadow near the creek's mouth. Floodplain meadows

Drinking Water Week, May 2-8

The week of May 2-8 marks the annual celebration of **Drinking Water Week.** This year's theme is Celebrate Water. Drinking Water Week highlights the role we all can play in conserving and protecting our water supplies and in getting involved in local decisions that affect water sources. Many water system operators take this opportunity to educate communities about where their water comes from, how safe it is, and what they can do to conserve it. EPA's Public Environmental Resource Center offers several free publications and other resources related to drinking water. Just call 206/553-1896 1-800-424-4EPA. Or call the

1-800-424-4EPA. Or, call the American Water Works Association at 303/794-7711 or 1-800-926-7337.



are very important ecologically. In a functioning meadow, the

creeks's surface waters are intricately connected with the subsurface waters in the meadow. The

meadow has areas of wetland vegetation and provides valuable wildlife habitat, as well as cool, late summer flows to the creek.

In the 1960s and 1970s, the creek had been moved out of its meadow meanders and routed into a ditch. The straight, ditched creek dug down over the years and disconnected from the meadow. This drained the water under the meadow. As a result, wet meadow vegetation changed to dryer upland grasses; late summer flows dwindled to a trickle; and summer water temperatures increased to greater than 75F. Though the stream corridor was fenced in 1988 to restrict livestock from the streambanks, recovery was limited with continued streambank erosion, stream channel downcutting, and inability of the stream to interact with its meadow floodplain.

In the mid-1990s, ranch management changed, livestock use was curtailed in the meadow, and planning began for improving the meadow functions as well as the creek channel, habitat, and water quality. Landowners worked with the Confederated Tribes of the Umatilla Indian Reservation, who in turn partnered with EPA and other state and federal agencies, Union County, and the Conservation District for financial and technical assistance.

The first major phase of the project was implemented in 1997 by shaping the creek channel in the upper half of the meadow to direct water out of the ditch and back into the old meadow meanders.

Streambanks were stabilized with whole-tree structures; large wood was brought in for beaver use; vegetation was planted; and monitoring stations were established.

Monitoring shows important improvements. The meadow is much wetter; subsurface water levels remain higher later in the summer; and vegetation is responding to the wetter conditions. The meander channel is much narrower and more curvy than the ditch; the stream gradient is gentler; streambanks are more stable; and pool habitat is much better in the meander channel. Beaver activity, which helps restore wet meadows, has increased. Perhaps most notable are the immediate in-stream temperature improvements. In-stream temperatures often require years to drop after restoration activities. But for this project, temperatures decreased dramatically in the meander channel, even on the first day after returning the creek to the meadow meanders. Work will continue in 1999 and 2000.

In addition to the meadow project, another major project in the watershed involves rerouting a US Forest Service/ County road away from a major tributary creek of McCoy. The present road confines the creek to a narrow channel with poor stream-side vegetation. It also leads to higher stream temperatures and sediment loads. Road work will begin in 1999. Several smaller projects are also planned throughout the McCoy Watershed. Altogether these projects are expected to address the main concerns in the watershed and lead to improved habitat and water

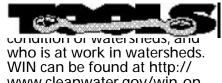
quality. For more information, call Christine Kelly, EPA, at 541/962-7218.

Mini Grants Support Watersheds

The Watershed Assistance **Grants Program**, administered by River Network, supports innovative projects that build the capacity of communitybased partnerships to conserve or restore watersheds. Building capacity involves increasing a partnership's ability to resolve watershed problems well beyond the life of the grant. Grants will be made to local watershed partnerships in the United States. Proposals for Watershed Assistance Minigrants (less than \$4,000) are due June 15, 1999. Awards will be announced in mid-July. For more information contact Kathy Luscher of River Network at 503/241-3506, ext. 16 or visit http://rivernetwork.org/ wag.htm.

Watershed Info Network Unveiled

EPA recently unveiled the Watershed Information Network (WIN). This Internet-based tool can be used to find and exchange environmental information needed in activities to sustain and restore water quality. WIN can be used to provide information on how to network with others, what



www.cleanwater.gov/win on the Internet.

Puget Sound Shore Steward Guide Available

Puget Sound Shoreline Stewardship Guidebook---a handy 24-page pocket guidebook especially for folks living on or near the shores of Puget Sound---is now available from the **Puget Sound Water Quality** Action Team. Produced with support from EPA, the book is full of "sound advice" for living in harmony with the Sound, and information to increase understanding of the natural environment at the shoreline. It offers tips for learning more about your land, controlling runoff from homes, understanding erosion, planning for beach access, keeping septic systems operating properly, and more. Resources for more information are also included. For a free copy, call the Action Team at 1-800-54-SOUND.

Video Focuses on Community **Drinking Water**

A new video that looks at the real life challenges and successes experienced by three different communities when faced with contaminated drinking water is now available to the public. Titled The Problem with Shallow Disposal Systems, the 15-minute video explains that shallow disposal systems are a common but often over-looked source of contamination to drinking water resources. In addition, the video shows that there are simple, preventative steps a community can take to reduce threats to their water resource without disrupting the community's economy or going into debt. For more information about shallow injection wells, visit www.epa.gov/ region 10. To order a free copy, contact Calvin Terada at 206/ 553-4141 or e-mail: terada.calvin@epa.gov.

Plan Your WA **WaterWeeks Activity Now**

You are invited to plan a WaterWeeks event! WaterWeeks is an annual, fiveweek series of water and habitat activities that takes place August 28 through October 3 throughout Washington State. WaterWeeks events help residents experience, appreciate, and take action to protect our state's lakes, rivers, watersheds, ocean waters, groundwater, and water habitats.

Events are planned by community and service groups, schools, environmental organizations, tribes, cities, counties, conservation districts, and others. Activities commonly include habitat restorations, salmon celebrations, river, lake and beach cleanups, watershed tours, underwater cleanups, children's activities, and much more.

The WaterWeeks organization supports event planners by promoting local activities in a widely-distributed WaterWeeks Activity Guide, on a web site, and through media coverage, posters, banners and other products and services, all for free. Register your WaterWeeks event on-line by May 28 at www.waterweeks.org.

For more information and/or an activity planning packet, call 360/943-3642 or e-mail your request to waterweeks@waterweeks.org

Stream Monitoring in Oregon's Coast Range

In 1994, the Oregon Department of Environmental Quality began a new approach for monitoring stream conditions on a regional scale. In a partnership between EPA Region 10 and Oregon and Washington state water quality agencies, EPA funded a two-year monitoring project in the Coast Range of Oregon and Washington. The project is known as the regional Environmental Monitoring and Assessment Program, or R-EMAP. The results of the R-EMAP program in Oregon's Coast Range are summarized in a brochure now available called Regional Stream Monitoring in Oregon's Coast Range. The brochure also describes the usefulness of R-EMAP to other state programs and how this type of monitoring will be used across the Western U.S. For more information or a free copy, call Gretchen Hayslip, EPA, at 206/ 553-1685, 1-800-424-4EPA x1685, or email hayslip.gretchen@epa.gov.

Paper Explores Surface, Ground Water Interaction

Have you ever thought about how ecosystems might be affected when water below ground meets up with surface water? EPA Intern Kerianne Gardner recently prepared an issue paper that pulled together information from a variety of resources to show the ecological significance of surface water interacting with groundwater. This paper, called The Importance of Surface Water/Ground Water Interactions, is now



Washington Organic and Recycling Council (WORC) held a seminar last March on this topic, called *Soils for Salmon*. WORC is pointing to City of Redmond Guidelines for Landscaping with Compost-Amended Soils as a good place to start for techniques

Beneficial Landscaping Begins With Healthy Soil

Beneficial landscaping, readers may recall, is the use of natural landscaping practices that yield many economic, environmental, and aesthetic benefits. One of those benefits is the control of stormwater runoff. Plants, particularly undisturbed native vegetation, help intercept, store, and release precipitation from rain or snow. But did you know that soil plays a very important role as well?

Undisturbed forest soil--that light, fluffy, and humus layer at the soil surface-- acts as a sponge by absorbing water, retaining it, and slowly releasing it to enable decomposition, ground water recharge, stream flow regulation, and cleansing of water supplies. To maintain these functions, disturbance to this soil layer must be prevented or minimized.

If you now hold land that has been cleared, the topsoil scraped away, and the soil compacted by heavy machinery, you will be hard pressed to grow healthy plants and, if your mineral soil is hardpan clay or compacted glacial till, it will do little to absorb, retain, and cleanse water. However, it is possible to amend such soils by adding organic matter and compost (decomposed organic matter) so that they function more like native, vegetated soils and less like an impervious surface. The benefits of doing so---water conservation, reduced water runoff, increased nutrient retention, reduced need for chemicals, erosion and sediment control, improved vegetation, cost savings to property owners, and the

and application rates. There are no hard and fast rules, though; for turf and other landscaping they advise establishing a soil organic content goal of between 8 and 13%. But you won't go wrong by amending your soil to a depth of 8 to 12 inches with 20 to 30% organic matter. By adding compost to our soils, we also make beneficial use of yard and farm wastes and conserve landfill space.

There is no better time to begin--for the sake of salmon and a flourishing, healthy landscape. For more information on this subject, contact WORC at 360/754-5162, or alacarte@olywa.net. Or contact Elaine Somers, EPA Beneficial Landscaping Program, at 206/553-2966, 1-800-424-4EPA, or somers.elaine@epamail.epa.gov.

Learn About Pesticides and Food

Did you know EPA recently published a brochure on potential exposure to pesticides in foods and ways your family can minimize exposure? Called Pesticides and Food: What You and Your Family Need to Know, the pamphlet gives an overview of the 1996 Food Quality Protection Act, which sets a tougher standard than the original Act, on the amount of pesticides allowed on foods. It mentions the reasons for the particular vulnerability of

children to pesticides, and some measures parents can take to minimize their family's risk.

The tri-fold brochure was produced in consultation with the U.S. Food and Drug Administration and the U.S. Department of Agriculture. Check your local grocer for a copy---4.3 million copies were distributed to grocery stores around the country. Or, call EPA Region 10 at 1-800-424-4EPA for a free copy.

Many related documents are available from EPA Region 10, including:

*Pest Control in the School Environment: Adopting Integrated Pest Management (August 1993, 43-page booklet)

*Citizen's Guide to Pest Control and Pesticide Safety (September 1995)

*Protect Yourself from Pesticides (English and Spanish versions)-poster for agricultural workers

May

American Wetlands Month, Terrene Institute, 703/548-5473, www.terrene.org/, or EPA Wetlands Protection Hotline 1-800-832-7828.

2-8: National Drinking Water Week, American Water Works Association, 303/794-7711.

3-7: Idaho Water Awareness Week. Dick Larsen, Idaho

Department of Water Resources, 208/327-7933, dlarsen@idwr.state.id.us, or visit www.idwr.state.id.us/idwr/info/h20week/waw1.htm

- **6-7:** Washington Water Law Conference, Seattle, Washington, 206/621-1983, 1-800-854-8009, or www.lawseminars.com.
- 7: Survival Skills for Watershed Groups, Grants Pass, Oregon. Northwest Rendezvous, 503/590-4240.
- 8: Penn Cove Water Festival, Whidbey Island, Washington. WSU Beach Watchers, 360/679-7391, bertas@wsu.edu.
- 12-13: Design and Retrofit of Culverts in the NW for Fish Passage, University of Washington Engineering Professional Programs, 206/543-5539 or email uwepp@engr.washington.edu
- 13-14: Measuring Biological Integrity in the Lower Columbia River: How Do We Do It?, Eagle Creek, Oregon. Lower Columbia River Estuary Program. Bruce Sutherland, 503/229-5995, or email sutherland.bruce@deq.state.or.us
- **15:** Survival Skills for Watershed Groups, Portland, Oregon. Northwest Rendezvous, 503/590-4240.

June

- 1: Abstract Due Date for American Water Resources Association Conference: Watershed Management to Protect Declining Species to be held December 5-9 in Seattle. AWRA, 703/904-1225 or www.awra.org
- **25-28:** Boise River Festival, Idaho, 208/345-8363, www.boiseriverfestival.org



July

15: Deadline for August WaterTalk, Andrea Lindsay, Editor, 206/553-1896, 1-800-424-4EPA x1896, or email lindsay.andrea@epa.gov.

August

8-11: American Society of Civil Engineers, International Water Resources Engineering Conference, Seattle, Washington. ASCE, Jeff Gallagher, 591/659-1676 x 6009, www.asce.org

Tribal Assistance Handbook on **Internet**

A Tribal Environmental and Natural Resource Assistance Handbook, developed by the Domestic Policy Council Working Group on American Indians and Alaska Natives, is now available. This handbook is a compilation of federal sources of financial and technical assistance programs available for tribal environmental management. It is intended to benefit tribal environmental staff and to inform federal, regional, state, and local government employees about the sources of environmental assistance available in order to improve customer service to the tribes. A significant section on EPA is included in the handbook. Sources of assistance span various environmental categories, including: air, water, plants and animals, toxics/hazardous waste, solid waste, pollution prevention, emergency preparedness and response, and environmental education. The document is available at http://www.epa.gov/indian/tribhand.htm

A Note of Thanks:

A special word of thanks to **Debbi** Packard, who has served as assistant editor and major contributor for this and the previous WaterTalk issue. We look forward to her continued involvement! Much appreciated, Debby!

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