

Newsletter of the Kenai Watershed Forum • Winter 2006



Inside this issue

Mixing Zones, not over yet!

You have probably heard about a recent controversy surrounding the new set of regulations the State of Alaska is proposing for MIXING ZONES. Twice the state asked the public to comment on a proposal to allow pollution in streams where salmon spawn. Twice there was a resounding NO from the public in response to the proposal. Recently the State decided, that despite what the public said, it would be o.k. to pollute the most sensitive areas of streams under certain conditions!

Representative Paul Seaton and Representative Kurt Olson have introduced House Bill 328, and Senator Gary Stevens has introduced companion Senate Bill 225, that would ban any new mixing zones from being located where fish are known to spawn.

Our legislators need to hear that the public wants the water quality protected in these sensitive areas. Please let them know this is important that this issue concerns you and that you are paying attention to their votes. Send our representatives an email to let them know that the state is out of line to authorize any mixing zones in areas where fish are known to be spawning or rearing.

Make Your Voice Heard! Here are the email contact addresses for the legislators that represent the Kenai Peninsula:

State Representatives

representative_mike_chenault@legis.state.ak.us representative_kurt_olson@legis.state.ak.us representative_woodie_salmon@legis.state.ak.us representative_paul_seaton@legis.state.ak.us

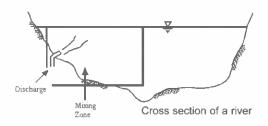
State Senators

senator_con_bunde@legis.state.ak.us senator_albert_kookesh@legis.state.ak.us senator_gary_stevens@legis.state.ak.us senator_tom_wagoner@legis.state.ak.us

For a complete comparison between the old regulations, new regulations, and proposed HB 328, please contact our office 907-260-5449.

What is a mixing zone?

Even with the best treatment technology, wastewater discharges from sewage treatment and industrial facilities (i.e. mining, seafood processing, oil exploration or production, etc.) sometimes contain low levels of pollutants. Most wastewater discharges permitted in Alaska are to surface waters such as the ocean, lakes, streams, or rivers. The area where treated wastewater is authorized by the state Department of Environmental Conservation to mix with a water body is called a mixing zone.



MISSION

Working together for healthy watersheds on the Kenai Peninsula.

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Board Election Results

We held our board elections this past December. Benjamin Jackinsky and Jeff King ran and were both re-elected to the Board. Over 35% of the total ballots we sent out were returned. That tells that you, our members, are paying attention to what we're doing and that you care about the direction of our organization.



KWF Board at Retreat in Seward

Thank you for your continued support and guidance.

Thank You!

KWF's Sponsor-A-School program has touched the lives of thousands of our area youth. Through this program we bring hands on science into the classrooms. We have even dedicated staff time by hiring an education expert to rejuvenate our program. This program wouldn't be possible without the support of local business-

es. Many thanks to *Soldotna Professional Pharmacy*, *Arby's*, and *Agrium* for their continued dedication to environmental education in our area.



Mushroom Lovers Unite

The Kenai Peninsula now has a mushroom club! The Kenai Peninsula Mycological Society held its first meeting on December 3rd, 2005. Currently, the club meets on the first Saturday of each month at 1:00 p.m. in the Cook Inlet Aquaculture Building, 40601 K-Beach Road.

KPMS is the brainchild of Dominique Collet and Steve Scott. Many already know Dominique as a self-taught, encyclopedic naturalist. He is a knowledgeable student of mycology and has given many presentations on local fungi.

Steve moved to Soldotna from Montana in 2004. In Montana, he had been an avid 'mushroomer' and member of the Kootenai Valley Mycological Societý, a club he co-founded in 1993. With Steve taking on the organizational responsibilities and Dominique offering his expertise as the 'resident mycologist,' the KPMS was born.

The vital role of interim secretary and treasurer is being filled by avid amateur mycologist Janice Chumley, who many of you know as the 'bug lady'

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Coastal Zone Management Program now at KRC

The River Center has one more borough office under its roof. Gary Williams, Coastal Program Coordinator for the Kenai Peninsula Borough, has relocated from the main borough building to what was formerly the KRC's small conference room. This transition brings the Kenai River Center another step closer to its goal of being an inclusive facility for all river and wetland-related management and permitting issues on the Kenai Peninsula. Although Gary has been attending KRC staff meetings for quite some time, it's good to have him officially join the Kenai River Center team. Welcome, Gary!

Sockeye swimming at the Kenai River Center

The Kenai River Center has its very own fish stream, and sockeye are spawning year-round. Thanks to the One Percent for Art program that supports art in public facilities, the Kenai River Center lobby is now adorned with four beautiful stained glass panels that depict red salmon in a healthy river system. The windows were designed by Nikiski artist Joyce Getchell and created by Joyce and her husband Gene. They were installed in mid-December and the staff and visitors to the River Center are enjoying watching the increasing daylight stream through this lovely and educational work of art.

Roads Conference planned for April

The Kenai River Center and Kachemak Bay Research Reserve are hosting a conference on Kenai Peninsula roads science and policy. The conference will take place in Homer on April 5 and 6. This is the third in an annual series of conferences that brings local decision-makers together with science and policy experts to examine a particular natural resource management issue facing the Kenai Peninsula Borough. Past conferences have examined coastal erosion and floodplains.

The topic this year is local roads and their interactions with the landscape. A particular focus will be on road/water interactions and the impacts on watershed functions, flooding and fish passage. We will examine policy, planning and engineering approaches to problem-solving and spend a day discussing solutions that make sense for the Kenai Peninsula.

Mushrooms, continued from page 2

from the Cooperative Extension Office.

The community interest and response has been phenomenal. In just over two months KPMS has grown to over 75 members, including people from as far away as Eagle River.

Education tops the list of plans for the current year. Every meeting will include some type of practical instruction. It may be a guest speaker, a video or slide show from the NAMA resource library (KPMS is an affiliated member of the North American Mycological Association) or a presentation by Dominique, Steve or another member of the club.

Club members are able to purchase two great books (Mushrooms Demystified and All That The Rain Promises And More) at a 50% discount. In addition, each member receives a Resource and Information packet and a CD with a great mushroom identification program. The club plans to have a lending library in place before the year is out, with a variety of resources, including thousands of pages of identification keys.

To put all that knowledge to use, the club will also organize forays – fun times when everyone goes out in search of mushrooms and then re-convenes to admire the day's bounty. Forays are also a time to learn, with numerous specimens that need to be identified and many questions to answer. Throughout the spring and into the fall, whenever a fresh fruiting appears, the hunt will be on!

For more information about KPMS, contact Janice Chumley at 776-5277 or Steve Scott at 262-3541, or check out the Spore Print on-line (http://kpms.blogspot.com) for monthly newsletters and more.

Welcome Shelly!

Hello, my name is Shelly Gradwell-Brenneman, KWF's new K-12 Education Coordinator. I am excited for the opportunity to work with you all at the Kenai Watershed Forum. I have lived out on Cohoe Loop since 1997 seasonally; and year-round since 2003 with my husband, Jerry and son Ansel. We have a set-net site on Cohoe Beach where our crew of family and friends have been salmon fishing for 21 years. We enjoy fishing, hiking, skiing and gardening at our place near the Kasilof River. We have always believed in good stewardship of our watersheds and are pleased to be a part of the Kenai Watershed Forum.

I grew up in Iowa, where my grandparents Jim and Dorothy Maish, both local conservation leaders, started my outdoor education when I was a toddler. I was guided and inspired to become an educator by their sharing of time, appreciation, and knowledge about natural resource conservation. Over the years, I learned a lot from our adventures together canoeing the Iowa River, hiking in the Colorado mountains, birding along the Platte River, and many hours exploring the flora and fauna of our local marsh. Just last summer, my Grandpa and I contin-



Shelly in action at a school visit.

ued our adventures and flew to the east side of Cook Inlet, circled Mt. Redoubt, and explored some rivers, lakes, and bays. I have enjoyed traveling around Alaska and learning about our unique ecological resources.

I have a B.S. degree in Environmental Education from Colorado State University and a M.S. degree in Rural Sociology and Sustainable Agriculture from Iowa State University. My natural resource education career highlights include working as a naturalist educator in Rocky Mountain National Park, Colorado; leading K-6 environmental education and teacher training programs in Costa Rica; coordinating youth and adult education programs at the Iowa 4-H Education and Natural Resources Center; teaching science classes and facilitating Extension workshops with Iowa State University; and founding and coordinating the Youth Natural Resource Education and Leadership Program for the non-profit organization, Practical Farmers of Iowa. I especially enjoyed working with youth in hands-on projects such as collecting and identifying stream insects as indicators of water quality and restoring stream banks by planting willow cuttings. I look forward to leading more of these types of hands-on education activities with the KWF.

With some great help getting oriented from Robert, Josselyn, Ole, Jan and Stephanie and the KWF Board Members (thank you!), my first few weeks with KWF have been great! Twice this month, Robert and I led the KWF stream study activities with 2nd/3rd grade classes at Kaleidoscope Elementary in Kenai. We hiked through the snow down to the creek to gather turbidity data for their year-long water quality study in conjunction with KWF staff. The students carefully collected and charted data, applied knowledge they have learned this year, and asked good questions about streams, water quality, salmon, and snowmelt. The benefits of KWF's watershed education activities were reflected by the students' enthusiastic participation at the stream and in the classroom and the fact that the students chose to film their KWF stream study as a feature for their school TV commercial.

I look forward to leading more school stream studies and other watershed education activities, as well as helping with Caring for the Kenai and the Kenai River Festival. I am beginning to research and write a KWF K-12 Watershed Education Curriculum based on Kenai Peninsula Borough science standards. And I am also focusing some of my experience in education program development and grant writing to help expand the KWF Education Program. In order to better plan KWF education activities, I have been meeting with staff from other local organizations and attending their education programs. We are working on ways to cooperate and coordinate local watershed related education efforts so they complement each other. I look forward to meeting more KWF members and hearing your ideas and suggestions for our education program. Please contact me at the office or at shelly@kenaiwatershed.org

Lights, Camera, Action!

KWF stars in commercial with Kaleidoscope School



As many of you know, KWF staff are enjoying monthly visits throughout the school year with the 2nd and 3rd graders in Mrs. Stroh and Mrs. Shelden sclasses at the Kaleidoscope School of Arts and Sciences. Along with classroom presentations about watershed functions and water quality, we lead the students down to their local creek to monitor turbidity and other stream activity. The 3rd graders have been really enthusiastic about the monthly visits and do a great job with turbidity testing and charting their data.



The students and teachers recently reported how pleased they are with the KWF creek visits especially because the students continue to bring the hands-on educational activities back to the classroom and make connections in their own lives. In fact, the students chose to have their creek monitoring program with KWF featured on a recent television commercial about their school!



Top: Robert leading turbidity test during filming.

Middle: Children examining the results.

Left: Shelly and Mrs. Stroh at the creek.

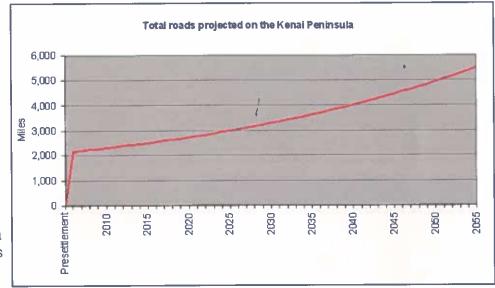
Future Stream Crossings

an ALCES Update...

KWF staff recently assessed the current and future impact of roads on Kenai Peninsula streams. There are currently 2,237 miles of road spanning the Kenai Peninsula. We have identified a total of 531 stream crossings on these roads, 380 over state cataloged anadromous streams and the additional 151 on the remaining streams, most of which also support anadromous species but aren't under state protection. A previous culvert passage study on the Kenai Peninsula by the Alaska Department of Fish and Game found that roughly 20% were found to block passage of anadromous fish. If all of the 531 stream crossings on the Kenai Peninsula were culverts, instead of some number of bridges or roads that run directly through streams, that

would mean that there are currently a potential of 106 barriers to salmon migration across the peninsula!

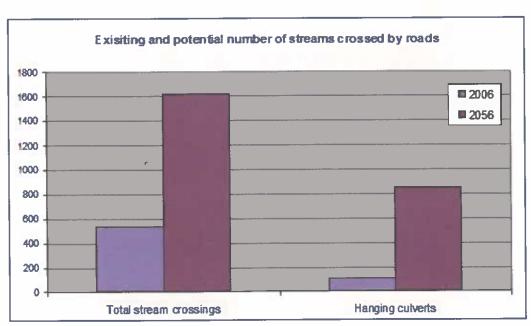
A recent simulation by ALCES (Alaska Landscape Cumulative Effects Simulator) shows that by 2055 there could be a total of 5,692 miles of road with 1,622 stream crossings. If no hanging culverts are replaced there could be a total of approximately 850 hanging culverts on the peninsula blocking migration to anadromous species.



If you are interested in learning more about these projections on how the peninsula is expected to change come to our meeting with the original developer of the ALCES model, Dr. Brad Stelfox on Wednesday, May 10th. Brad will be in town to present some of the major changes in land uses and natural disturbances that we expect to be significant factors influencing the landscape of the peninsula over the next 50 years.

This meeting will mark the completion of the ALCES model, which has been developed for our area with the

input of numerous individuals and agencies. ALCES will soon be available for planning purposes by the consortium members, a collaboration of 14 federal. state, tribal, and non-profit entities. KWF plans to run simulations and present the findings on issues of significance to the landscape of the Kenai Peninsula and the people who live here. For more information on the ALCES model contact Stephanie Sims at 260-9492 or stephanie@kenaiwatershed.org.



Kenai River Watershed Protection Grant

An update from Brenda Trefon, Tribal Environmental Protection Officer, Kenaitze Indian Tribe

In 2005, the Kenaitze Indian Tribe was awarded a Targeted Watershed Grant from the US Environmental Protection Agency for conservation and protection of the Kenai River. This grant is a cooperative effort between the tribe, the Kenai Watershed Forum, and the Alaska Department of Natural Resources.

The watershed grant has four goals: a 2-stroke boat motor buy-back program to reduce hydrocarbon levels in the Kenai River; water quality monitoring; a riverbank erosion study; and community education and outreach for protection of the Kenai River.

The first phase was to examine the role that boat wakes play in riverbank erosion in the Lower Kenai River, we spent several summer days on the river. From July 19 – 22, field crews of State Park volunteers, KWF employees and volunteers, and tribal members were stationed at five target points along the river, from (inland) mile 10.3 to mile 19. Each crew counted every boat that passed by. For each boat, we noted the type of bow (flat bottom or "V"), the number of passengers, the direction of movement (upstream or downstream) and whether the boat was on-step or plowing through the water. While we were counting, the Army Corps engineers were filming with time-lapse cameras and video

tape recorders at each station, and measuring the amount of energy in each boat wake as it reached the riverbank. This information will help determine the effects on different bank types from different boat configurations. Not surprisingly, we found that different stretches of the river see different amounts of boat activity. At mile 10, we counted over 5,000 boats passing by each day, while farther inland



at mile 19, there were only 500 boats each day. We counted the boat passes, not the number of boats, so a boat that passed by one hundred times in one day would have been counted one hundred times. The engineers reminded us that every boat pass creates a wake, which hits the riverbank with a certain amount of force regardless of whether that boat has passed by previously or not.

The results from this study will be available later this year, together with aerial photography of the banks, to paint a more comprehensive picture of how boat wakes are affecting the Kenai River. A water quality study by the Kenai Watershed Forum will also measure a second effect of boats—hydrocarbon pollution. Look for updates on that work in future editions of Currents.



As of 2/28/2006

KWF Membership

Thank You! The following people have recently contributed to the Kenai Watershed Forum.

Benefactor - \$500 Ken & Sara Hepner

> \$300 Lance Trasky

\$250 Cheryl Moody

\$150 Tom & Sue Seggerman

River Steward - \$100

Ken & Judy Marlow
Jean Brockel
Lisa Parker and Steve Horn
Phil & Amanda North
Marge Mullen
Joey Banks
Bob Shavelson
McLane Consulting
James & Coleen Fassler
Ole Andersson & Jane Handy
Alaska's Last Frontier Fishing Lodge

Dennis & Katherine Gease Mitch Michaud and Jane Fuerstenau

Chinook - \$50

Ancel Johnson
Jane & Jack Handy
Eve Witten
Curt and Debbie Shuey
Charlie LaForge
Martha Farris and John DeLapp
Dana & Darlene Nichols
Betty Obendorf
Mike & Judy Blair
John & Leslie Morton
Barbara Jewell

Sockeye - \$25

Jim and Nedra Evenson

Aaron & Shawna Cooper

Mary Price
Mark and Arika Jensen
Marge Hays
David Gibbs

Louise Dubois
Bud & Sammy Crawford
Robin Veluce
Ken Lancaster and Mavis Blazy
Jeremy Anderson

Additional Contributions

Cheri Edwards Josselyn Burke & Ed O'Connor

Sponsor-A-School

Mike Navarre - Arby's Patty Weaver → Agrium Tom Hodel - Soldotna Professional Pharmacy

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