

CHEHALIS BASIN PARTNERSHIP
Chehalis Tribe “Lucky Eagle” Casino
Rochester, Washington
May 23, 2008
9:30 a.m. – 12:30 p.m.

Meeting Summary

MEMBERS & ALTERNATES PRESENT

Bonnie Canaday, Chair, Mayor Pro Tem, City of Centralia
Lee Napier, Grays Harbor County (Alternate)
Lyle Hojem, Citizen, Lewis County
Bob Beerbower, Grays Harbor
Mark Swartout, Thurston County (Alternate)
Charles Caldwell, Port of Grays Harbor
Bill Schulte, Lewis County Farm Bureau

Terry Willis, Citizen, Grays Harbor
Chris Hempleman, DOE
Chad Stussy, WDFW (Alternate)
Terry Harris, City of Chehalis
Jim Hill, Citizen, Lewis County (Alternate)
Patrick Wiltzius, City of Chehalis (Alternate)

OTHERS PRESENT

Randy Lehr, Grays Harbor Community College
Janel Spaulding, Watershed Facilitator
Don Loft, The Evergreen State College
Ellie McMillan, Chehalis Basin Fisheries Task Force
Matt Ely, USGS
Eric Devlin, Nature Conservancy
Mark Horton, HDR Engineering, Inc.
Jake Schroeder, Nature Conservancy
John Clemens, USGS
Joseph Jones, USGS
Cameron Marshall, USGS
Ashley Misener, Rochester Middle School
Chase Grimmatt, Rochester Middle School
Brynna Bronson, Rochester Middle School

Juan Guterrez, Rochester Middle School
Martin Woodruff, Rochester Middle School
Stephanie Clinger, Simpson Elementary School
Andrew Baskett, City of Elma
Kathy Jacobson, Chehalis Basin Educational Consortium
Dana Anderson, ESD #113
Brett Desmond
Tom Bauer, Citizen, Grays Harbor County
Sally Toteff, DOE
Cheri Lindgren, Recording Secretary, Puget Sound Meeting Services
(Note: There were three other USGS representatives and several schoolteachers also in attendance.)

GENERAL PARTNERSHIP BUSINESS

Welcome, Introductions, and Roundtable Comments

Chair Bonnie Canaday called the Chehalis Basin Partnership (CBP) meeting to order at 9:41 a.m. Everyone present provided self-introductions.

Discuss and Adopt Draft Meeting Summary for April 25, 2008 Meeting

The April 25, 2008 minutes were approved by consensus.

SPECIAL PROJECTS AND PRESENTATIONS

Watershed Facilitator – Interview Outcome

Randy Lehr introduced Janel Spaulding. The interview and selection committee recommends the Partnership hire Ms. Spaulding as the new Watershed Facilitator. The position is grant funded for the next two years.

Update Regarding Watershed Plan Implementation – Groundwater Characterization

Lee Napier reported the Steering Technical Committee (STC) is working with the US Geological Survey (USGS) to develop a Scope of Work (SOW) for groundwater characterization. The STC is interested in advancing the groundwater characterization for two reasons:

1. A budget guidance response was submitted to the Department of Ecology (DOE) for the biennium.
2. Groundwater characterization outcomes could prove crucial to inform the Chehalis River Basin Flood Authority (Authority).

One issue is whether the CBP wants to advance the groundwater characterization project and follow the strategy proposed by USGS.

Matt Ely, USGS, provided an update on the organization's activities and the characterization and numerical simulation of the water resources of the Chehalis River basin. A document outlining the proposed study tasks was distributed. USGS submitted a formal proposal last December for the long-term characterization study. It's important to understand the entire basin system to answer both groundwater and site scale questions. Since the initial proposal, the December flood event shifted the focus. One issue is the study's relationship with flooding issues.

Mr. Ely reported that USGS approaches problems with data collection and data compilation. The agency plans to collect and compile data of the physical system involving the collection of new water levels and instrumenting a portion for real time purposes. One question is whether pumping more water out of the ground affects the Chehalis River. Forming a conceptual model follows data collection to build an understanding on how the system functions. Groundwater starts as surface water (creeks, streams, and rivers). On a basin-wide scale, it's important to understand what's occurring at the headwaters and along the valley floors. Previous records (stream flow gauges) will reveal how the river has functioned over time. A groundwater model is a tool to answer questions. The first task is to build a watershed (surface water) model that considers climate, temperature, precipitation, and cloud cover (boundary conditions) when calculating the potential evapotranspiration. The model USGS will use does have a flood mode to simulate flood peaks. However, it is not the preferred model to answer flooding questions but can be run in flood mode to understand how peaks might come and go. The end product is a basin-wide model simulating the system from precipitation to groundwater and out to Grays Harbor. Different model scenarios can then be performed to understand the basin. Information gained from the study will add value to short-term flood predictions.

Mr. Ely referred to the website address of: <http://wa.water.usgs.gov/projects/chehalis/>- containing information on the basin and preliminary seepage numbers. A Google map with individual measurement points is available on the website. USGS staff is creating geospatial shape files. The agency is close to completing a data series report to be published on the website.

A second document, *Mapping a Flood...Before It Happens*, was distributed.

Mr. Swartout asked whether the watershed model will be useful to evaluate potential storage sites. Mr. Ely explained how the proposed work could benefit the CBP. There are engineering concerns associated with onsite or offsite storage of flood peaks or diverting high flows to another area for holding purposes that will not negatively affect groundwater. Diverting high flows could be combined with aquifer recharge and recovery for use during summer months. The model can simulate a number of "what if"

**Chehalis Basin Partnership
Meeting Summary
May 23, 2008 Page 3 of 7**

scenarios. A flood hydraulic model will not answer groundwater questions. An understanding of the entire basin is needed. The problem is basin-wide even if flooding occurs in one area.

Discussion ensued about the work including tributaries. It was noted the agency's resources are limited. Mr. Ely stated there is no area within the basin that USGS would ignore unless a property owner asked the agency to leave. Local involvement is important.

Mr. Devlin asked whether USGS has completed similar projects in other watersheds in the state. Mr. Ely described other active projects underway in a number of watersheds (Chambers Clover, Puyallup, westside Skagit, Jefferson County, Yakima, and Spokane). Each basin is different hydrologically and there are slightly different concerns.

Discussion ensued about Light Detection and Ranging (LIDAR) technology, whether USGS plans to do additional LIDAR work in the Chehalis basin, and the Puget Sound LIDAR Consortium. Mr. Ely reported the federal government likes to see local financial participation.

Mr. Loft asked if anyone is looking at large impervious surfaces (onsite use of rain gardens) in conjunction with flood management. Mr. Ely replied USGS does not currently have any funded projects. Evaluating large impervious surfaces is included in regional type modeling.

Mr. Hojem asked whether USGS understands what the CBP is seeking. He inquired about the cost. Mr. Ely said the project is tailored to answer questions concerning water availability, how the system operates, and how future changes will affect the system. The total cost over a four-year period is approximately \$1.3 million of which USGS will contribute \$800,000. Often other agencies, such as the DOE fund projects or a line item could be included in the federal budget. Another option is forming a consortium with each group funding a portion of the proposal. Cities and counties could be asked to provide water use data. The biggest cost is obtaining water level measurements. The project estimate is based on USGS completing all the work. Property owners with private wells could conduct their own water level measurements, which could reduce the Partnership's costs.

Discussion ensued on the pros and cons of USGS conducting the work versus contracting with a private firm.

In response to a comment from Mr. Hojem, Mr. Swartout reviewed the STC's recommendation on the groundwater characterization project. STC members plan to meet with legislative representatives in November/December to discuss funding requests. The STC concluded that a combined strategy is the most cost effective approach to the groundwater characterization, such as USGS providing oversight and acting as the project manager to ensure the information is accurate and meets the agency's standards and methodologies while pursuing opportunities with the private industry to complete portions of the study.

Joseph Jones, USGS Senior Hydrologist, reported flood crest information is created from watershed models maintained by the National Weather Service (NWS). A forecast center in Portland generates a prediction on the depth of the river during flood events. USGS developed a method to turn that hydrography into a map showing what floods over the entire river basin. That map is then placed on the internet. The NWS generates updated hydrographs (flood inundation maps) every 3-6 hours up to five days prior to a flood. The mapping could also be used to pre-position emergency equipment. The Federal Emergency Management Agency (FEMA) is interested in the flood inundation mapping. USGS also

**Chehalis Basin Partnership
Meeting Summary
May 23, 2008 Page 4 of 7**

plans to speak to the Emergency Management Division of the Military Department in Washington State on the availability of hydrograph data and additional funding needs.

Discussion ensued on Doppler radar imagery sites on the West Coast and NWS models.

Student Presentations from Representatives of Simpson Elementary School, Rochester, and the Summer Watershed Leadership Program

Ms. Napier introduced new DOE Regional Director for the Southwest Region Sally Toteff. Ms. Toteff is replacing Dick Wallace. She was appointed on April 28, 2008.

Ms. Toteff acknowledged Kathy Jacobson for her work and commitment as a collaborator with the CBP and as an educator. On behalf of DOE, Ms. Toteff presented Ms. Jacobson with an Environmental Excellence Award.

Ms. Jacobson thanked everyone for the recognition and award. She said she's enjoyed working with youth to help them develop a sense of stewardship within the community.

Rhonda Hunter, said she's worked with Ms. Jacobson since the beginning of the Summer Watershed Leadership Program (SWLP). She read a letter from the previous Educational Service District (ESD) #113 Assistant Superintendent highlighting Ms. Jacobson's dedication, vision, and important leadership in providing environmental learning in the Chehalis basin and thanking her for her work.

Chad. Stussy read a letter from former 5th grade Elma Elementary School teacher Carol Boyer also recognizing and thanking Ms. Jacobson for her innovative work in the Chehalis basin and engaging with students. Mr. Stussy agreed with comments shared in Ms. Boyer's letter.

Dana Anderson, Assistant Superintendent, ESD #113, thanked Ms. Jacobson.

Mr. Anderson introduced Martin Woodruff with the project science team.

Mr. Woodruff shared information on Ms. Jacobson's contributions to Rochester Middle School (RMS). All 500 RMS students participate at some level within the program. The school offers a special class focusing on the Chehalis basin. Students compete for placement in the class.

Four project science eighth graders – Ashley Misener, Chase Grimmert, Brynna Bronson, and Juan Guterrez provided a PowerPoint presentation.

Ms. Misener introduced the project science program and goals. The class is designed for students with high interest or science abilities. Students worked with Ms. Jacobson to help restore habitat along the river. Students participate in a number of field trips during the school year.

Ms. Bronson shared learning experiences and knowledge gained from a five-day annual trip to the Olympic Park Institute (OPI). She described details of the two main events, which involved searching for fossils on the beach, storytelling, and cooking.

Mr. Grimmert shared activities and strategies associated with water quality testing at the Chehalis and Black Rivers and testing macro invertebrates.

**Chehalis Basin Partnership
Meeting Summary
May 23, 2008 Page 5 of 7**

Ms. Bronson presented information on the River of Words project coordinated by the Chehalis Basin Education Consortium (CBEC) and ESD #113. The CBEC sponsors the “Words and Images from the Watershed: Washington’s River of Words” art and poetry contest. The contest is designed to help youth explore the natural and cultural history of the place they live, and to express, through art and poetry, what they discover.

Ms. Misener provided information on the 2007 Watershed Festival held in Aberdeen.

Mr. Guterrez referred to the “Congress” held at Grays Harbor College. He said he found the experience awesome, exciting, and worthwhile.

Mr. Grimmert described how students planted more than 200 trees in a valley near Tenino. The goal was to restore habitat. The class learned how trees are important to the ecosystem and riparian areas.

Mr. Guterrez spoke about the benefits of the project science class. It’s filled with learning and interesting subjects.

Mr. Woodruff introduced Wendy, a teacher, and students from Simpson Elementary School (SES) in Montesano. The teacher reported SES has participated in the program over the last five years. Currently, there are 85 fourth grade students involved.

Cole, a student, described his stream walk along the Wishkah River. Four reasons for the river’s health include shade, no litter, blue water, and no debris.

Another student, Cameron, spoke about water quality testing at Lake Sylvia.

Cassidy, another student, described the student congress at Alder Creek.

Another student, Lydia, spoke about her experiences associated with entering the River of Words art and poetry contest.

Stephanie Clinger said she teaches with Wendy. She described how the program and contest benefits students and supports school curriculum. She spoke about Ms. Jacobson’s passion, energy, and excitement in working with students. The activities open the classroom to the outside. A new elementary school will contain riparian zones in front of each grade level for students to maintain. Student artwork depicting sites along the river will be displayed in the hallways.

Copies of this year’s “Words and Images from the Watershed: Washington’s River of Words” art and poetry contest winners were displayed. Ms. Jacobson reported an awards ceremony will be held at DOE on May 30, 2008 at 12:45 p.m. honoring students, parents, and teachers.

Student Logo Contest

Ms. Jacobson reported two different school groups entered artwork in the local contest. She asked members to view the artwork displayed on a table and select their favorites at the conclusion of the meeting. The winning artwork will be used as the logo for this year’s Watershed Festival.

A Progress Review of Water Quality Monitoring in the Chehalis Basin

Ms. Napier referred to Mr. Lehr's update on the coordinated water quality monitoring program. She distributed copies of two letters from Mr. Rountry for the Chair's signature seeking:

- The Quinault Indian Nation's (QIN) support to help the Partnership's water quality data compilation work and keeping the Partnership updated on its sampling results by supplying Chehalis basin data on an ongoing basis.
- A letter from DOE to watershed partners asking for activities accomplished to help protect water quality in the Chehalis watershed.

Mr. Lehr reported a joint (Grays Harbor College, Confederated Tribes of the Chehalis Reservation, and CBP) water quality monitoring program was implemented in September 2006. He provided a summary of the project to date and products available for review.

Mr. Lehr introduced Don Loft. A spreadsheet database created by Mr. Loft was displayed. The spreadsheet uses a math program interpreting water quality information to generate different graphs and charts. A graph depicting average and maximum temperature values was displayed. Sites that are in compliance as well as sites not meeting water quality standards are available. The data is constantly refreshed. The result is a real time system monitoring water quality throughout the Chehalis basin. Information can be extrapolated to reveal what occurs on a month-to-month basis. The data is represented on a map with a color-coded scheme available to the public. Different data layer options include dissolved oxygen, temperature, turbidity, and fecal coliform analyses for specific sites in the basin. Mr. Loft also created an algorithm that averages data. Another map was displayed revealing sites in violation of water quality standards.

Mr. Lehr reported the intent is to continue to add data as collected. The information is sent to DOE's environmental information system and is available to the public on the internet. The tool should prove useful to other watersheds throughout the state. Mr. Loft is also working through a land use classification project to identify commonalities between landscape characteristics and water quality. One goal is to have a clearly defined understanding of what's happening on the landscape and how it affects water quality.

Members reviewed the draft letter to the QIN. Ms. Napier reported the data will be transmitted directly from the QIN to Grays Harbor College for use in the GIS Clearinghouse and water quality project.

The CBP generally agreed with the letter and asked Chair Canaday to sign and send the letter to the QIN.

Members reviewed the draft letter from DOE to watershed partners. Ms. Napier noted a similar letter was mailed last summer. The CBP Water Quality Committee has been working on compiling information on what's been accomplished within the past 10 years to protect Chehalis basin water quality. Mr. Rountry will finalize the draft letter and coordinate the signatures.

The CBP generally agreed with the content of the letter and asked Chair Canaday to sign the letter to Chehalis watershed partners.

Ms. Spaulding described her interest in the Watershed Facilitator position. She reviewed her background and education.

Chair Canaday welcomed Ms. Spaulding.

Mr. Swartout said the CBP rendered a key decision when it created the Watershed Facilitator position and hired Ms. Spaulding.

The CBP generally agreed that the groundwater characterization project is a high priority. Further, the Partnership generally agrees with the STC's recommendation to move forward with the approach suggested by USGS for the proposal.

Ms. Napier said the next step is to secure additional funding.

CLOSING COMMENTS, DISCUSS AGENDA FOR JUNE MEETING

Ms. Napier reviewed topics for the Partnership's June meeting:

- Anatomy and outcomes of the flood. Tim Walsh will provide a report on the Department of Natural Resources (DNR) findings concerning mass wasting in the basin.
- A presentation by David Batker, Earth Economics is tentatively scheduled for August. Mr. Batker is attending the STC's June meeting. There is a private foundation interested in funding his work in the Chehalis basin.

The June 5, 2008 STC meeting will begin at 1:30 p.m. instead of 9:30 a.m. at WDFW in downtown Olympia.

Mr. Lehr advised that he is leaving Grays Harbor College for a job opportunity in the Midwest as manager of water and fisheries resources. He said he looks forward to moving back and participating in the management of something that is important to him. He spoke about how he has enjoyed his time at the college. The college is interested in continuing its relationship with the CBP. The college's dean of programs will attend the next Partnership meeting. Mr. Lehr said he is leaving for the Midwest in July.

Ms. Willis and Chair Canaday thanked Mr. Lehr for his work on behalf of the Partnership.

ADJOURNMENT

With there being no further business, Chair Canaday adjourned the meeting at 11:54 a.m.