

**CHEHALIS BASIN PARTNERSHIP**  
**Chehalis Tribe “Lucky Eagle” Casino**  
**Rochester, Washington**  
**October 24, 2008**  
**9:30 a.m.**

**Meeting Summary**

**MEMBERS, ALTERNATES & GUESTS PRESENT**

Bonnie Canaday, Chair, City of Centralia  
Lee Napier, Grays Harbor County  
Bob Beerbower, Grays Harbor County  
Mark Swartout, Thurston County (Alternate)  
Kahle Jennings, City of Centralia (Alternate)  
Chris Hempleman, Department of Ecology (DOE)  
Chanele Holbrook-Shaw, Citizen, Thurston County  
Bob Burkle, Washington Department of Fish & Wildlife (WDFW)  
Janel Spaulding, Grays Harbor College  
Don Loft, The Evergreen State College (TESC)  
Dr. Joel Green, Grays Harbor College  
Bill Schulte, Lewis County Farm Bureau  
Chuck Caldwell, Port of Grays Harbor  
Art Lehman, Port of Centralia  
April Boe, The Nature Conservancy  
Susan Bogni, Thurston County  
Amy Iverson, WDFW  
Laura Orr, U.S. Army Corps of Engineers  
John Donahue, Washington State Department of Transportation (WSDOT)  
Tim Grochowski, City of Chehalis  
Narendran Kodandapani, Grays Harbor College

Terry Harris, City of Centralia  
Patrick Wiltzius, City of Chehalis (Alternate)  
Mark White, Confederated Tribes of the Chehalis Reservation (Alternate)  
Bob Macleod, Thurston County  
Harry Pickernell, Confederated Tribes of the Chehalis Reservation  
Birdie Davenport, Department of Natural Resources  
Bob Amrine, Lewis Conservation District  
Phil Rupp, Lewis County  
Lyle Hojem, Citizen, Lewis County  
Jim White, Lewis Conservation District  
Tom Bougher, SURFRIDER Foundation  
April Boe, The Nature Conservancy  
David Rountry, DOE  
Rich Carlson, US Fish & Wildlife Service  
Teri Liomin, Chehalis Basin Fisheries Task Force (Alternate)  
Valerie Gow, Puget Sound Meeting Services  
Jim Hill, Citizen, Lewis County (Alternate)  
Dave Vasilauskas, City of Chehalis  
Terry Willis, Citizen, Grays Harbor County

**GENERAL PARTNERSHIP BUSINESS**

**Welcome, Introductions and Roundtable Comments**

Chair Bonnie Canaday called the October 24, 2008 meeting of the Chehalis Basin Partnership (CBP) to order at 9:34 a.m. Everyone present provided self-introductions.

**Discuss and Adopt Draft Meeting Summary for September 26, 2008**

The September 26, 2008 minutes were accepted as amended correcting “WASSP” at the top of page 3 to reflect “WCSSP.”

**Changes to the Agenda**

The agenda was corrected to remove establishing a policy regarding comments on governmental policy. On the same day of the November meeting, the Department of Ecology is conducting a water quality workshop. Members are encouraged to attend the workshop in place of the November meeting.

Nomination of officers was added to the agenda.

## **SPECIAL PROJECTS AND PRESENTATIONS**

### **Watershed Festival Post Event Report**

Ms. Spaulding reported approximately 1,200 to 1,500 people attended the Watershed Festival on Saturday, September 27, 2008 at the Morrison Riverfront Park in Aberdeen. Eight hundreds programs were provided to attendees. The City of Centralia won the water taste test. The Centralia City Council will receive an award as winners of the water taste test.

Ms. Spaulding acknowledged several members and attendees who attended the festival:

- Mark Swartout
- Bob Beerbower
- Terry Willis
- Chanele Holbrook-Shaw
- Joel Green
- Don Loft
- Kahle Jennings
- Bonnie Canaday

Ms. Spaulding acknowledged the Confederated Tribe of the Chehalis Reservation, which served approximately 200 plates of salmon.

The weather cooperated and children enjoyed many festival activities. At the CBP's booth, the Watershed Pledge was distributed. Chris Hempleman and Nancy Allison assisted in providing coverage in the booth during the festival.

Watershed Awareness Week activities were successful and included a successful ivy pull, as well as a forestry hike led by Ron Schillinger. A video and social gathering was held at the Westport Winery. A birding hike was also conducted. The City of Centralia provided a stormwater tour after the CBP's meeting in September.

Next year's event is planned for the same location in Aberdeen. There have been some suggestions to move the event to the upper basin. However, other events could be scheduled in the upper basin early in the summer, such as a bike tour or coordination with the 4<sup>th</sup> of July festival held in Centralia.

Ms. Spaulding advised that her role will expand in the coordination of the festival. She suggested establishing subcommittees to assist in coordinating the event.

Ms. Spaulding reported Kathy Jacobson will present a final report on the festival.

Mr. Rountry inquired about the outcome of the school tours with "Fin" and whether there is any consideration for the Partnership to construct a Fin replica. Ms. Spaulding said she visited two schools with Fin. There have been discussions about constructing a replica. However, there are some logistical issues associated with storage and a trailer.

Mr. Tom Bougher thanked Ms. Spaulding on behalf of the local SURFRIDER chapter for the opportunity to work together on watershed outreach.

Ms. Willis thanked Ms. Spaulding for her efforts as well as the work of others in previous years to promote the festival and contributing to its success this year.

Mr. Swartout suggested adding an element to the festival on flood awareness because of the timing associated with the festival. Information could be provided on flooding, flood insurance availability, and associated flood activities in the Chehalis basin.

### **Presentation – Water Quality Implementation Projects**

#### ***City of Chehalis Poplar Tree Farm***

Mr. Patrick Wiltzius reported in 1996, the Department of Ecology conducted a Total Maximum Daily Load (TMDL) Study on the Chehalis River and imposed discharge limitations on the City of Chehalis during dry weather periods. The City signed a consent decree agreeing to no discharge into the river during certain conditions involving the months from April to mid-December. During the design and planning of the new wastewater treatment plant, the City considered options to comply with the consent decree. The City evaluated several options and elected to pursue a poplar farm for discharge of effluent. Poplar trees are fast growing, have a large leaf area, extensive root system, straight stems, are easily propagated, and have a large nitrogen demand. The trees are irrigated using the effluent. Byproducts include biomass for renewable energy, chips for paper and home products, solid wood products, engineered products, and plywood and OSB. Loading rate of water is three quarters of a million gallons per growing season per acre. The tree farm requires minimal site management with harvesting occurring every six to 15 years. The plantation is irrigated between April and November. The site is also used for the potential distribution of biosolids from the treatment plant. Other options of the tree farm include the creation of a windbreak for evergreen forests because the growth of poplar trees can be between 10 to 20 feet a year when irrigated.

Mr. Wiltzius reviewed the design of the poplar tree plantation. A 450-acre farm near the plantation was purchased with 250 acres converted to the poplar tree plantation with the remaining in roads and archeological set-asides. The farm is divided into 11 different management units planted with 40,000 trees in 2004 with nine different hybrid varieties to provide diversity. The farm was planted for future logging and during some times of the year when the trees lose leaves, a portion of the plantation is designed for groundwater recharge of Class A reclaimed water in impoundment berms. The farm includes a maintenance building and an irrigation system.

Mr. Wiltzius displayed a map of the plantation and identified the location near Highway 6.

Mr. Wiltzius reviewed the initial preparation of the land for the plantation that included removal of trees, groves, swamps, grading, and removal of structures. Phase 3 was recently completed to include completion of the above ground irrigation system and adding more rock to roads. He displayed pictures of the site. The existing barn had to be demolished and involved mitigation because of the historical significance of the barn.

*Lyle Hojem arrived at the meeting.*

A large section of the property included oak trees. The City worked with the Chehalis River Council and retained oak trees with trunks larger than 16 inches in diameter. One tree known as the “sacred oak” was

preserved on the site. Stories surrounding the tree point to early Native American princesses buried near the site as well as early farmer wives buried in the area.

Some areas of the plantation were deemed to be of archeological significance, which involved preservation of the sites and no tree plantings.

Mr. Wiltzius described the irrigation system and different type of equipment used to maintain the plantation.

Mr. Wiltzius displayed pictures of the plantation at different stages of growth.

The plantation is designed and permitted by the Department of Ecology and the Department of Health for reclaimed water. There are two types of reclaimed water that can be applied. One is Class C reclaimed water, which is essentially secondary wastewater effluent, and Class A water. Class C water can be applied at agronomic rates. Groundwater monitoring wells were installed as part of the permit requirements to monitor both quality and travel of water. The river water level is also monitored at the Highway 6 Bridge and at another location. The monitoring is conducted quarterly. Annually, heavy metals are tested.

The above ground irrigation system can be operated from the treatment plant. Mr. Wiltzius shared photos of the irrigation system.

Mr. Wiltzius described the impacts of the December 2007 flood, which caused havoc to the irrigation system, perimeter fence, and the roadway. Highway 6 was washed out with over three to four feet of water over the entire plantation. The buildings were built above flood level and were not impacted. A work crew of five people worked six weeks to remove debris. The work crew was hired for another six weeks for pruning.

Trees will be over 100 feet tall at harvest and 18 inches in diameter.

In the north part of the plantation, loss of trees occurred in one management unit. Because of the flood, there is still groundwater close to the surface in that area.

Ms. Holbrook-Shaw asked whether soil analysis was conducted on the different management units. Mr. Wiltzius said some initial soil testing was completed during the development of the plantation. Prior to the flood, the north area was not saturated.

Mr. Wiltzius said as part of the TMDL Study, Dairy Gold was also affected and cannot discharge to the river during certain periods. Dairy Gold discharges to the Plantation when it's not allowed to discharge to the river. The City has first right of refusal on the property for potential expansion of the plantation.

Mr. Wiltzius reported the treatment plant fared well during the flood. It was built three feet above flood level. However, the old treatment plant, located in the floodway, sustained heavy damage.

Mr. Harris complimented the work of Mr. Wiltzius and for his efforts in examining all the possibilities associated with the poplar tree farm. The wastewater treatment plant was completed on time and under budget.

Mr. Jennings credited the Councils of both Chehalis and Centralia for wrestling with difficulties both cities were facing and for undertaking the enormous public works projects costing millions of dollars.

Mr. Wiltzius was asked about the projected income from the poplar tree farm. Currently, the cost of operating the plantation costs approximately \$60,000 a year. The harvest rate could be approximately \$500 an acre, which will not totally offset the cost of the plantation. By using the water to irrigate the plantation, the City keeps water within the basin instead of pumping water downstream.

Mr. Lehman asked how the trees will be harvested. Mr. Wiltzius said it's likely the City will hire a logging contractor to cut each tree within units to be harvested. Stumps will be used as markers for planting replacement trees. The first harvest is anticipated to occur before 2019.

Chair Canaday inquired about the number of presentations to other jurisdictions interested in establishing a plantation. Mr. Wiltzius reported he's provided presentations during wastewater conferences. Many people have toured the plantation as well. The City is one of the leaders and many people are contacting the City for information about the plantation.

Mr. Wiltzius said most of the damage from the flood was covered by the Federal Emergency Management Agency (FEMA).

#### ***Basin-Wide Monitoring***

Ms. Napier introduced Don Loft, who is working with Grays Harbor College on the Coordinated Water Quality Monitoring Program. Mr. Loft shared information on coordinated monitoring activities to date.

Mr. Loft reported on his work to map water quality monitoring sites, which began with Randy Lehr. Data is collected by the Confederated Tribes of the Chehalis Reservation and inputted to a Microsoft Access database in a series of tables and queries to break down the information for analysis. The longitude and latitude coordinates have been used to map the locations in GIS to create a geo database and a base map so that the data can be graphically represented. Data from the databases have been joined to the geo database. The goal is to provide the information on the internet. However, there have been some issues with the tables reading correctly on the server.

Mr. Lehr's initial work was converted and downloaded to the DOE's EIN database as well as conversion to the Access database. Since then, more work has been performed in the creation of the map of the monitoring sites as well as working on flow basins by using data from elevation models to define flow basins for each of the sites.

Mr. Loft reviewed the data tables and displayed samples of the data tables. The initial tables from Mr. Lehr were broken down for querying specific information, such as sample types, locations, site number, and longitude and latitude. For example, the tables enable extraction of the number of sites exceeding a water quality standard for any of the water quality testing parameters, such as dissolved oxygen, temperature, pH, turbidity, and fecal coliform. The information can be graphed to show the percent of violations occurring over time.

Mr. Loft reviewed the state standards for each testing parameter. Data from the databases are from samples taken in October 2006 to June 2007. Samples are collected monthly from each site. Mr. Pickernell noted that some of the sites do run dry, which means fewer samples for some sites. Additionally, all five samples were averaged for total compliance or violation of water quality standards and then mapped. Mr. Loft said from the data elevation model, he was able to find the basins flowing to

each of the sample sites, which can assist in determining possible point sources of pollution. Land use data can be overlaid to reveal possible contributors of pollution contributing to testing violations.

Mr. Loft reported he is mapping the flow basins for the Satsop River. Overall, two sites on the Satsop are in violation an average of 35% of the time. Land use data reveals forested area. Mr. Loft reviewed testing results for each testing parameter. Mr. Loft responded to questions and explained the standards are based on DOE's highest standards except for turbidity, which is a mid-range between the high and low standard.

Ms. Spaulding reported that before Mr. Lehr left for his position, he worked with the tribe to purchase and install seven long-term water probes to record water quality parameters. She displayed a map of the probe sites. All probes have been installed. Mr. Pickernell is providing a presentation on the probes at the next Water Quality Committee meeting. The probes will measure temperature, pH, dissolved oxygen, turbidity, and connectivity. Some of the probes were placed close to USGS gauging stations to compare data. Mr. White said the sites were selected in part based on access to the locations. The probes are anchored securely with cable and are engraved with the Partnership's phone number. The probes were purchased through the tribe. The tribe's insurance will cover the probes. The probes cost \$8,000 each. The City of Chehalis sponsored part of the cost.

#### **Distribute Watershed Pledge**

Ms. Spaulding reported she distributed approximately 100 Watershed Pledges during the Watershed Festival. Individuals who complete and mail the pledge card will receive a sun catcher donated by DOE. She asked members and attendees to fill out the pledge card and implement actions in the watershed pledge. Paper for the pledge was donated by Grays Harbor Paper. Grays Harbor College printed 250 copies as well as Grays Harbor County. Printing cost \$1,400 for 250 color copies. Grays Harbor County Solid Waste is cosponsoring the pledge.

Ms. Spaulding said the pledge can be modified for specific needs of each jurisdiction. Ms. Napier advised that the pledge will be available on the Partnership's website. Chair Canaday announced that the Confederated Tribes of the Chehalis Reservation has donated \$1,500 for printing the pledge.

Ms. Spaulding said she is submitting an article about the Watershed Festival in the *Drops of Water* November issue.

Discussion followed on possibility distributing the pledge to local schools in each county.

#### **NEXT MEETING**

Members discussed attending DOE's water banking workshop on November 21 in lieu of the Partnership's monthly meeting. Members agreed to cancel the regular meeting and attend the workshop on Friday, November 21, 2008 at the Department of Ecology in Lacey from 9:00 a.m. to 3:00 p.m. Ms. Hempleman said she will forward directions electronically. Approximately 22 attendees indicated they will attend the workshop.

#### **NOMINATIONS OF OFFICERS**

**Mr. Swartout moved, seconded by Mr. Harris, to open nominations for Chair and Vice Chair and nominated Bonnie Canaday as Chair and Mark White as Vice Chair. Mr. Hill moved, seconded by Mr. Harris, to close nominations. Motion carried.**

#### **ADJOURNMENT**

With there being no further business, Chair Canaday adjourned the meeting at 11:35 a.m.

Valerie Gow, Recording Secretary/President  
Puget Sound Meeting Services