

**CHEHALIS BASIN PARTNERSHIP
STEERING TECHNICAL COMMITTEE (STC) MEETING MINUTES**

**Department of Ecology
300 Desmond Drive
Lacey, Washington
November 2, 2006
9:30 AM**

Meeting Summary

PEOPLE IN ATTENDANCE

Kahle Jennings, City of Centralia	Cheri Lindgren, Puget Sound Meeting Services
Glen Connolly, Chehalis Tribe	Bill Lotto, Lewis Co Economic Dev Council
Bob Beerbower, Grays Harbor Co Commissioner	
Bruce Jones, Quinault Indian Nation	
Taylor Pittman, US Fish & Wildlife Service	
Chanele Holbrook-Shaw, Heernett Env Foundation	
Chad Stussy, WA State Dept of Fish & Wildlife	
Mark Swartout, Thurston County	
Lee Napier, Grays Harbor County	
Charles Pitz, WA State Dept of Ecology	
John Mudge, Citizen	
Lee Danecker, Citizen	
Terry Willis, Gray Harbor County	

Announcements and Introductions

Mark Swartout called the Steering Technical Committee (STC) meeting to order at 10:02 a.m. Everyone present provided self-introductions.

Approval of Agenda

Members discussed and approved the meeting agenda:

1. Hydraulic Continuity – List of Questions
2. Detailed Implementation Plan (DIP) Follow Up
 - a. Amendment - What does it mean
 - b. Frame Implementation
3. Legislative Briefing
4. Chehalis Basin Partnership November 17, 2006 agenda

Hydraulic Continuity – List of Questions

Committee members discussed the questions formulated at the last meeting and input provided by some of the members. The questions included:

1. What is our geographic area and scale we want to model?
2. What level of accuracy do you want the tools to provide?
3. How will the tools be used and by whom?
4. Should the tools be predictive?

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5. What do we want to predict?
6. What constraints are there based on budget?
7. What is the long-term commitment of the Partnership to achieve the goal?
8. Are we committed to collaborating in developing and using one model?
9. Will the Partnership want to use the model to predict the capacity (water supply) of the watershed?
10. What are the impediments in collecting the data needed for the model?
11. Will there be areas that will require a higher degree of accuracy and how will they be determined?
12. What data do you already have?
13. Do we want spatial (location of impact), temporal, or both?

With respect to question #1, there is an interest to obtain information about how surface and groundwater interacts with the entire basin. Gathering the information will take significant time. The committee should start with developed and rapidly growing areas. The information will prove useful to evaluate the impacts of future local development and the potential for water cropping in areas that are not developing rapidly to serve those that do.

There are certain areas that could be removed right away such as creeks that enter the south part of Willapa Bay, as well as the upper reaches of the Humptulips, Satsop, and Chehalis rivers to name a few. Forests in different states of regeneration or with different characteristics are not priority areas unless the use converts outside of forestry. Some forest areas might be managed more as watersheds for water supply in the future.

Mr. Swartout highlighted modeling efforts undertaken at the McAlister/Yelm sub-basin. A "Draft: Junior Water Rights and Fish Presence in WRIA 22 and 23" display map was available for reference purposes.

Mr. Pitz drew an example on a whiteboard to illustrate how the model is driven by where groundwater does or does not occur. The watershed is dominated by alluvial or fluvial deposits that bear quite a bit of water, which fills the central Chehalis valley. The remainder of the basin is bedrock terrain and is not a source of water supply, or part of the model domains. Recharge occurs at the subsurface within bedrock terrains, leaving about one-third of the watershed that will be modeled. He illustrated how grids and cells can be broken down further to generate more specific information about the characterization of the groundwater and how it interacts with surface water.

Discussion followed about soil types specific to Centralia, that soil types are not confined within a particular grid, "boundary affect" as it relates to computer modeling, and how a model is calibrated. The model will also perform predictive work. Discussion ensued about the advantages of a fine model compared to a coarse model when applied to specific applications such as mitigation and surface withdrawals from rivers.

Mr. Pitz pointed out there are two major classes of models - steady state and transient. He illustrated examples of the models on the white board. Utilizing a steady state model is likely for the Chehalis Basin. A transient model takes into account changes over time. Steady state models can be refined to account for transient effects.

Conversation followed about the need for additional water rights within the next several years. Mr. Mudge asked if analyzing soil data will answer questions sooner rather than relying on modeling information that is several years away. Mr. Pitz provided another drawing to illustrate the soil horizon,

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which is usually not much deeper than six feet. The County Soil Survey provided significant information about the first six feet. There is only a general idea of what lies within the subsurface. Conversation about fractures in bedrock producing little water supply, the “water bearing zone,” the three-dimensional geometry of the geology, and other characteristics of the Chehalis River Valley followed.

Mr. Jennings reported Centralia’s new water system plan shows the city has enough capacity for the next 25 years accounting for projected growth activity. The city is already looking for additional water 40 years beyond the planning horizon. Mr. Mudge and Mr. Jennings commented that the basin is closed. Mr. Jennings suggested perhaps there is a need for two different models. There is insufficient water for consumptive use in the upper bedrock basins, but it is those watersheds that provide the surface water. Management of the watersheds does affect flow regimes and surface runoff. He asked a clarifying question of whether the discussion focuses on groundwater/surface water interaction. Ms. Holbrook-Shaw replied it does, and the answer to the question will answer other questions. Those answers could lead to potential funding resources. Mr. Jennings commented that the small tributaries are important for fish. Ms. Holbrook-Shaw agreed. Mr. Jennings stated another issue is management of forestlands and how management impacts flow regime and fish.

Mr. Jones said the question deals with the geographic area. He said he would like to use a large-scale model for the entire basin and then narrow in on specific areas for modeling. Creating a clearinghouse where all the basin information is gathered and stored in a central location will provide a valuable tool when trying to determine the flow within the watershed or when evaluating other issues.

Mr. Swartout asked how much it would cost for a steady state large cell model of the basin. Mr. Pitz replied the cost will be significant because the basin consists of approximately 2,600 square miles. Mr. Jones said he’s thinking more in terms of a geographic database system that contains all the existing information about flows. Modeling could then be performed on high priority areas within the basin. Ms. Willis agreed it’s difficult to understand how water affects each of the tributaries without first looking at the entire basin.

In reply to an inquiry from Mr. Swartout about the best starting point for modeling, Mr. Pitz said there is no reason for not beginning the model with big coarse cells in areas where information is needed and then looking at smaller areas as necessary and combining them at a later date.

Discussion followed about the GIS clearinghouse and how it works with Modflow. Mr. Pitz said there are programs that allow GIS systems to interact seamlessly with Modflow. While GIS databases are powerful, they are not a replacement for fundamental characterization work that should be done by a professional hydrologist.

Mr. Jennings said it’s his understanding that GIS is great for displaying information, but it doesn’t create the data. Mr. Jones added the model will provide the “silhouette” and supporting tools.

Mr. Pitz outlined the types of information necessary to build a model. GIS is good for two dimensions and for mapping what’s on the ground. A numerical groundwater model is a three-dimensional construct. The GIS department could assemble the surface information needed to build the model.

Mr. Swartout said Mr. Pitz is helping the group to more clearly understand what modeling is and what it can do. The discussion has touched on the first five questions. He suggested the STC package the

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questions in such a way to initiate a discussion with the Chehalis Basin Partnership (CBP) to help answer the questions.

Mr. Stussy said important questions to answer are how to implement a model within a basin that comprises 2,600 square miles, at what cost, and whether using a phased approach is an alternative. Ms. Holbrook-Shaw added if the STC has an idea of what is needed to start the work, it could approach the Legislature in December about potential funding for the project in 2007.

Mr. Pitz conveyed the Chehalis Basin is a large watershed. It sounds like the group is looking at a larger scale, steady state groundwater model that will be refined over time. The group will need to hire someone to do the work such as a private consultant or someone from the public sector such as US Geologic Survey (USGS). He encouraged the committee to contact other agencies within the state that have hired consultants to develop watershed models and review the costs. The cost is potentially a seven-figure number. Conversation about a potential timeline followed in light of the limited information available. Mr. Pitz said once the goal is established, he could help identify the steps involved to get to the point of being able to create a model. Many of the preliminary steps are necessary whether the CBP decides to model or not. The group can't make the analyses without the fundamental characterization information.

Mr. Danecker asked if two models are more appropriate than one, such as a model for the upper part of the basin and another for the lower watersheds. Mr. Pitz replied possibly, but it's a decision for the modeler once the committee has identified the goal.

Discussion ensued about hiring a consultant to develop a scope of work. Mr. Jennings conveyed he's meeting with a consultant about a different matter on November 3, 2006. He said he is willing to ask the consultant if he can come up with a number. Ms. Napier said the committee and a consultant need to understand the scope. Mr. Pitz replied that a consultant cannot provide costs or a timeframe without knowing the answers to many of the questions the group has developed.

Discussion followed about other entities modeling different parts of the basin and incorporating pertinent data that has been gathered by other agencies (Army Corp of Engineers) into the model work. Mr. Jennings said once a goal has been established, entities can use the foundation to guide upcoming work in a way to fill information gaps in the future. Mr. Pitz said a modeler could quickly incorporate the information into a larger model.

Ms. Willis questioned whether the STC and the CBP are committed to the modeling project, and whether there is the capacity to fund the proposal.

The group agreed to review the remaining questions beginning with, "What is the long-term commitment of the Partnership to achieve the goal?"

Mr. Jennings asked how commitment is defined. Mr. Jones said the Quinault Indian Nation fully supports the modeling effort. Mr. Jennings conveyed that the City of Centralia supports the project conceptually. Mr. Swartout indicated the Thurston County Board of County Commissioners (BoCC) is interested in identifying funding sources that would advance the proposal. One level of commitment is staff support from member agencies. Implementing the plan requires an entirely different level of commitment that includes a consistent level of funding and agencies sharing information and working together.

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Members discussed the next question, "Are we committed to collaborating in developing and using one model?" Mr. Jennings stated it's too early to answer the question. The STC needs to evaluate and understand the strengths associated with alternatives. Mr. Swartout stated it's important that the venture is mutually beneficial to everyone and that agencies support the modeling approach.

Dialogue followed about the CBP and jurisdictions having different priorities that can feed the model, expanding technology (both hardware and software), taking an organic approach, and the Modflow modeling system.

The STC discussed question #9, "Will the Partnership want to use the model to predict the capacity (water supply) of the watershed?" Mr. Jennings replied yes, and questioned what the group is trying to predict. Mr. Swartout said, "you can't manage the watershed without measuring it first."

Concerning #10, "What are the impediments in collecting the data needed for the model," Mr. Swartout said the question gets back to the commitment piece. The Department of Ecology (DOE) will not issue an approval letter from the Nisqually Tribe unless Olympia, Lacey, and Yelm have done the modeling work for the water right permits. Mr. Jennings said agencies will be best served by understanding how things interact, learn the options and limitations, and have the ability to react as things evolve.

Members reviewed question #11, "Will there be areas that will require a higher degree of accuracy and how will they be determined?" Mr. Jennings said the answer is yes and that the group will make the determinations based on priorities identified by the Partnership and available resources.

Mr. Jennings said Centralia has local data for well depths and pumping records of its municipal and monitoring wells. Mr. Pitz reported DOE recently completed a study for the Centralia/Chehalis area. Approximately three-fourths of the information needed to build the model was assembled during the study. The study includes a comprehensive water quality component. Starting "big" and working down could prove to be a more cost effective approach. However, more work is required upfront.

The committee discussed the last question. Mr. Jennings said it is important that the model can evolve over time as the inputs change. Further dialogue followed about the differences between steady state and transient models. Mr. Pitz explained "steady state" means things aren't changing. It's a static condition. However, static conditions can change. He drew another illustration on the whiteboard to better explain his statements. Further conversation followed about water rights.

Mr. Jennings and members thanked Mr. Pitz for his time and expertise. Dialogue about scheduling a briefing on the Centralia/Chehalis study completed by DOE followed. Ms. Napier indicated she would provide members with an internet link to access the report.

Break

Mr. Swartout recessed the meeting from 12:09 p.m. to 1:01 p.m. for lunch.

Detailed Implementation Plan

Mr. Swartout reported the STC voted to accept the Detailed Implementation Plan (DIP) at the last meeting with an amendment proposed by Ms. Holbrook-Shaw to develop an addendum by March 31, 2007. Mr. Jones confirmed that the Quinault Indian Nation will help draft the addendum to include the

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goals and objectives as stipulated in its letter to the Partnership. One question is how to progress with implementation and whether the CBP wants to continue to develop additional objectives. Another issue concerns Objective #17, "A work group representing basin-wide interests and agencies will convene to oversee the current and future scientific studies, and to develop and oversee the public process to recommend instream flow levels for the Chehalis Basin."

Discussion ensued about whether to further evaluate the top five objectives and the process to achieve the inflow objective piece. Mr. Jones said the process should be similar to the first five, such as scheduling a public workshop and brainstorming the key points for Objective #17.

Mr. Swartout asked whether the Quinault Indian Nation could sponsor the workshop or whether John Kliem is on contract. Ms. Napier responded Mr. Kliem is not currently on contract. Mr. Swartout said the Puget Sound Nearshore group is working to bring salmon recovery, watershed planning, and similar issues into one package that includes a funding element. The issue is how that venture might impact watershed funding for the rest of the state. He suggested the STC move forward and request additional funding from the Legislature in the next biennium in light of competing interests.

Discussion followed about the status of the Partnership's budget and available funds from the current budget cycle. Ms. Napier said there might sufficient funds to carry the group into spring. Ms. Holbrook-Shaw asked if the committee can use remaining funds to begin the instream flow work, including hiring a facilitator and scheduling the workshop. Ms. Napier replied it is a possibility. She questioned what's included in the amendment. Mr. Jones said the amendment is meant to address the issues raised by the Quinault Indian Nation.

Mr. Jennings stated there are four things the Quinault Indian Nation wants – 1) recommend new instream flows based on *credible* science, 2) make a commitment to restoration of fish habitat, 3) DOE must commit to adjudicate water rights in the basin, and 4) establish measurable objectives, timelines, and budgets in the DIP. The instream flows recommendation could be a subtask of "Interim Milestone 3.1," task #2. However, implementation is a different issue. Mr. Swartout added there are efforts underway to address salmon habitat. Mr. Jones replied it's not the physical fish habitat. The tribe is focusing more on instream flow and water quality and quantity as stated in the letter sent to the CBP that indicated there must be scientifically credible flows, the flows must not be further degraded, look at new withdrawals and diversions, and that there must be actions to restore flows or limit current uses to increase flows.

Mr. Jennings pointed out there is a group opposed to adjudication. That could be an issue the group cannot resolve internally. Mr. Swartout stated adjudication will not put water in the stream. Conversation ensued about the tribe's expectations regarding flows to protect instream habitat conditions, best available science (BAS), and the difference between the 1976 flow and the new instream flow that will become the new regulation with a priority date of 2008. Mr. Jones added a goal of the CBP is to voluntarily manage the watershed. Discussion of the difference between setting instream flows and target flows followed. Mr. Jennings conveyed it's his understanding the Quinault Indian Nation wants to set new instream flows as a rule using BAS. The new instream flows then become the goal the plan is moving towards to provide adequate levels of water for fish and people.

Members discussed the Instream Flow Incremental Method (IFIM), how the science works, how the 1976 instream flows were set in the basin, and how to meet a new standard when the 1976 standard hasn't been achieved.

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Ms. Willis said the second instream flow is a water right. Mr. Jennings said it's not a consumptive water right. Mr. Swartout added the consumptive right to take water from the system is closed.

Additional discussion about incorporating the instream flows recommendation within "Interim Milestone 3.1" and how to best address the next group of objectives followed. Mr. Swartout said the STC could schedule a workshop focused on Objective #17. Then, based on the outcome, determine whether a new objective is more appropriate rather than incorporating it within "Interim Milestone 3.1."

Ms. Napier reviewed the next set of objectives previously identified by the committee, of which Objective #17 is one of the top three priorities. Mr. Jennings said the justification to address Objective #17 is based on prior practice of "lumping" action items in the past. Action item #17 could easily be "lumped" into Task 2 under 3.1. Ms. Napier said it appears the STC is amending the DIP. Mr. Swartout suggested forwarding the question of process to the CBP at its November 17, 2006.

Ms. Willis said she thought the committee would simply look at whether instream flows needed to be changed or not. Mr. Jones responded the group needs to agree on the science and then work towards that goal. Mr. Swartout suggested the action should be similar to, "taking a close look at instream flows, how they were set, and look at the science to negotiate an outcome."

Mr. Jennings identified a numbering problem that's creating confusion. The group is discussing Objective #17, which is actually DIP strategy #18, "A work group representing basin-wide interests and agencies will convene to oversee the current and future scientific studies, and to develop and oversee the public process to recommend instream flow levels for the Chehalis Basin." Mr. Jones said it is listed as Objective #17 on the website. Discussion followed about the fact the basin is closed, limiting exempt wells, and Objective #16, "Current regulatory flows should be retained; the Partnership wishes to preserve the 1976 priority date for those flow levels. Goals would fall under Water Quantity Goals."

Mr. Swartout reviewed a question to bring before the Partnership concerning strategies #17 and #18 and whether it will require a new task or whether it fits within Task #2 of "Interim Milestone 3.1." A workshop would be scheduled only for the instream flow subtask. Mr. Jennings conveyed that the addendum should include all four issues raised by the Quinault Indian Nation if the committee can reach agreement.

Members discussed the tribe's issue #3, "DOE must commit to adjudicate water rights in the basin." Mr. Jennings suggested coalition building between the Quinault Indian Nation and Confederate Tribes of the Chehalis Reservation prior to scheduling a meeting with DOE.

Mr. Connolly conveyed the Confederate Tribes of the Chehalis Reservation is not interested in adjudication as a whole. It sees no benefit. DOE should feel free to look at addressing and resolving all the outstanding water rights. The Confederate Tribes of the Chehalis Reservation is not interested in participating in a full adjudication. A "partial" has nothing to do with the Tribe's senior water rights. It's a DOE paperwork issue.

Members discussed adjudicating a federally reserved right under treaty or other agreement, that the tribes should sit down to talk about what is meant by adjudication, what triggers adjudication, and whether the Partnership would or would not support adjudication. Mr. Swartout suggested bringing the issue to the Partnership to determine the outcome of the objective.

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Discussion of the other two issues raised by the Quinault Indian Nation about making a commitment to the restoration of fish habitat and establishing measurable objectives, timelines, and budgets in the DIP and where they could fit within the committee's existing top five priorities followed. Mr. Swartout suggested "Interim Milestone 1.2" Task #1 (page 13) is more direct and "Interim Milestone 1.1" is another option.

Mr. Swartout said Commissioner Macleod would like the Partnership to pursue discussion about setting up an organization with consistent funding, such as special taxing districts, to implement the plan. An idea is to use a portion of the available resources to hire a consultant to identify ways the committee could establish a long-range funding source for implementation.

Discussion followed about a governance structure and/or identifying and hiring an executive director to carry out implementation decisions of the Partnership.

Ms. Napier reported that members will brief the Partnership about the issues discussed by the STC. Members asked Ms. Napier to contact the facilitator about scheduling a workshop and the cost. Mr. Jennings stated the workshop is an implementation piece of evaluating instream flows and is not part of meeting the March 31, 2007 addendum deadline. Mr. Jones said the tribe is asking that instream flows are part of the DIP. Mr. Jennings said the committee could add the next layer of detail between now and March. Ms. Napier expressed an interest in conducting the workshop prior to the March deadline to help establish a timeline with milestones. Mr. Jones said the facilitator might be able to help with the next phase of developing timelines and identifying required resources and agency commitments and additional expertise and studies needed to lay out a 10-year work plan.

Ms. Willis commented that the plan speaks to establishing a water quantity committee with a start date of November 2006.

In response to an inquiry from Mr. Swartout, Ms. Napier answered the meeting with both the House and Senate is scheduled for December 1, 2006.

Discussion ensued about the next steps to refine the DIP and meeting with DOE prior to the end of December to talk about how to spend the remaining funds.

Legislative Briefing

Ms. Napier briefed members about the process and agenda presented to the Legislature last year. A line item was included in DOE's budget for the Partnership. She suggested the committee thank the Legislature for the funds and document how the allocation has been used. A portion of the funding has been spent to build administrative capacity such as hiring Puget Sound Meeting Services. There is no deadline within the capital budget identifying a spending deadline. The group could ask the Legislature for funding to further build administrative capacity or help with implementing the plan. Mr. Jones said the committee could add developing a static model as a need. Ms. Napier said the committee will have an hour during lunch to talk with legislators. Mr. Jennings suggested developing a brochure for the presentation. He offered to provide Ms. Napier with an example.

Members discussed a "Draft Legislative Agenda" for the next biennium as summarized below:

1. Background/one-year update

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- Thank the Legislature for the prior \$75,000 funding level that was used for added capacity, outreach and education, and future possibilities
- 2. 2006 Accomplishments
 - GIS Clearinghouse
 - Coordinated water quality monitoring
 - Festival
 - Phase 4 of the DIP
 - Habitat projects
 - Inchoate water right report
- 3. 2008 Requests
 - Continued funding to build capacity and implement the DIP
 - Continued funding for GIS Clearinghouse (\$60,000)
 - Continued funding for the coordinated water quality monitoring (\$100,000)
 - Continued funding for outreach and education
 - Scoping the hydraulic modeling project
 - Begin groundwater characterization work based on outcomes of the scoping project
 - Begin public outreach program for IFIM and instream flows (use IFIM graphic)

Ms. Willis suggested the group fine tune the agenda highlighting specific projects and funding levels. The DIP outlines milestones that have come and gone. A legislator might look at the milestones and request a status report prior to allocating additional funding. Mr. Swartout concurred.

Ms. Napier said a goal is to have a draft agenda for the Partnership to review at the November 17, 2006 meeting.

In response to a question from Ms. Holbrook-Shaw, Ms. Napier replied the next STC meeting is scheduled for December 7, 2006 in Lewis County.

Discussion ensued about identifying a spokesperson to speak at the legislative briefing. The location has not been determined.

Chehalis Basin Partnership November 17, 2006 Agenda

Ms. Napier suggested the following agenda topics for the Partnership's November 17, 2006 meeting:

- Officer nominations
- Annual work plan (DIP)
- STC report on the modeling discussion
- Briefing on the STC meeting
- Review the proposed legislative agenda

Adjournment

There being no further business, Mr. Swartout adjourned the meeting at 3:00 p.m.

Prepared by Cheri Lindgren, Recording Secretary
Puget Sound Meeting Services