

CHEHALIS BASIN PARTNERSHIP
Chehalis Tribe “Lucky Eagle” Casino
Rochester, Washington
March 28, 2008
9:30 a.m. – 12:00 p.m.

Meeting Summary

MEMBERS & ALTERNATES PRESENT

Bonnie Canaday, Chair, Mayor Pro-Tem, City of Centralia	Ann Wick, Department of Agriculture
Mark Swartout, Thurston County (Alternate)	Lyle Hojem, Citizen, Lewis County
Bob Macleod, Thurston County Commissioner	Ron Schillinger, City of Montesano
Al Carter, Grays Harbor County Commissioner	Kahle Jennings, City of Centralia (Alternate)
Lee Napier, Grays Harbor County (Alternate)	Jim Hill, Citizen, Lewis County (Alternate)
Chris Hempleman, Department of Ecology	
Terry Harris, City of Chehalis	
Bill Schulte, Lewis County Farm Bureau	

OTHERS PRESENT

Valerie Gow, Puget Sound Meeting Services	Jeff Johnson, Northwest Hydraulic Consultants
Danielle Gardea, Puget Sound Meeting Services	John Penberth, Citizen
Randy Lehr, Grays Harbor College	Marc Horton, HDR Engineering
Lonnie Crumley, Streamworks Consulting	David Skinner, HDR Engineering
Kevin Farrell, Department of Ecology	Emile Combe, Cowlitz, Washington Council of Government
Patrick Wiltzius, City of Chehalis	Glen Connelly, Confederated Tribes of the Chehalis Reservation
Henry Rassman, City of Elma	Michael Golden, Lewis County Prosecutor
Laura Orr, US Army Corps of Engineers	
Jeff Johnson, Northwest Hydraulic Consultants	
Glenn Carter, Lewis County Prosecuting Attorney’s office	
Laura Orr, US Army Corps of Engineers	
Bill Zachmann, Department of Ecology	

GENERAL PARTERNSHIP BUSINESS

Welcome, Introductions and Roundtable Comments

Chair Canaday called the meeting to order at 9:38 a.m. Everyone present provided self-introductions.

Discuss and Adopt Draft Meeting Summaries for January 25, 2008 and February 22, 2008

The Chehalis Basin Partnership (CBP) approved the minutes of the January 25, 2008 and the February 22, 2008 meetings by consensus.

SPECIAL PROJECTS AND PRESENTATIONS

Watershed Facilitator Update on Hiring Process

Lee Napier distributed the current issue of *Drops of Water*. The *Drops of Water* is a publication inserted in all Chehalis watershed newspapers. The publication is published by the Chehalis River Council. The current edition of the *Drops of Water* has interesting information about the flooding.

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Randy Lehr, Grays Harbor College, updated members on the progress for recruitment of the Watershed Facilitator. The Watershed Facilitator will assist in watershed planning efforts. The job announcement was released several weeks ago. Review of applications will begin on April 14, 2008. The staffing of the position will occur immediately to expedite projects currently underway. The review committee will be comprised of representatives from Grays Harbor College and representatives of the CBP and/or the Steering Technical Committee (STC). Several applicants have good experience.

Anatomy and Outcomes of the December 2007 Storm

Chair Canaday reported on Governor Gregoire's visit to Chehalis on March 27, 2008 to sign two flood bills.

Hydrology Hot Wash – Condensed Version

Mark Swartout reported that at the CBP's January meeting, members discussed the CBP's role pertaining to the flood and there was consensus that a more technical side to the flooding was needed.

Mr. Swartout reported Dan Sokol, Department of Ecology provided a "hot wash" on the results of the flood to help better understand what occurred. A representative from The National Weather Service shared information on what occurred with the weather. Hydrologists discussed the hydraulics of the event. STC members believed the information should be provided to the CBP as well.

Summarization of December 2007 Flood Event

Mr. Swartout introduced Bill Zachmann, Department of Ecology, and Jeff Johnson, Northwest Hydraulic Consultants.

Mr. Zachmann provided members with a copy of his presentation, December 2007 Flood: Chehalis Basin Hydrologic Characteristics. Mr. Zachmann said he is the manager for the state's Watershed Lead Program. He acknowledged Patricia Olson, who was unable to attend, and who was instrumental in developing the presentation.

Mr. Zachmann described the December 2007 flood event. Northwest Cable News called the weather event a "Freak of Nature" that fueled the floods. Three storms added to the event:

- December 1, 2007 – The first storm produced cold arctic air and heavy snow.
- December 2, 2007 – Snow changed to rain as temperatures increased.
- December 3, 2007 – The most significant of the three storms. Temperatures reached record maximums and precipitation in concentrated areas exceeded recorded maximums.
- Intense rainfall led to major flooding in the region.

Mr. Zachmann pointed out the concentration of the precipitation in the upper Chehalis Basin was within the 24-hour period from 10:00 a.m. on December 2, 2007 to 10:00 a.m. on December 3, 2007. Frances and Wildwood stations both received over nine inches of rain.

From 10:00 p.m. on December 2, 2007 until 10:00 a.m. on December 3, 2007, seven inches of rain fell during the 12-hour period. Mr. Zachmann presented a graph showing the rainfall for each day in hourly increments.

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Many questions were raised about snowmelt and how much it contributed to the overall flood. Snowmelt was a factor, but there were no snow packs stations in the watershed. Only modeled data from satellite images are available.

Mr. Zachmann displayed a slide showing the difference between the snowmelt on December 2, 2007 and December 3, 2007. Additionally, he displayed a slide showing modeled snowmelts after December 4, 2007.

Mr. Zachmann reviewed the comparison between the 1996 flood and the 2007 flood. The Grand Mound station was depicted to show that the same area was utilized for the comparison. In Centralia in 2007, the flow was 3% lower than in the 1996 flood. At the Doty station there was 29,000 cfs (cubic feet per second) in 1996, whereas in 2007 it was three times more or 118% higher because of the concentration of rain in the area. The same occurred at Wildwood, which was 117% higher because of the rainfall. The Grand Mound station revealed a 6% increase between the 1996 and 2007 floods

The Skookumchuck Dam held water during the 2007 event reflecting a 68% lower level than in 1996. Closer to the dam, the numbers are 40% lower. Mr. Zachmann said he was unsure of the exact amount of water released from the dam during the flood.

Mr. Zachmann described the reasons for the 2007 flood occurring so rapidly. The 2007 storm was centered over the headwaters and moved from the upper watershed down to the lower watershed. Storms in the past have moved from the lower watershed to the upper watershed, so there was a different response.

Frances and Centralia stations were graphed to show the difference between the upper and lower watersheds from the 1996 storm and the 2007 storm.

Mr. Zachmann reported the 1996 event was a rain on snow event. The 2007 event was similar in that respect. There was snow, but the contribution of snow was far less in comparison to the rainfall. The "Hot Wash" included information about two tropical storms occurring in the Western Pacific and the jet stream, which picked up the moisture and moved it northward. The National Weather Service stated that storms usually come in from the west and move to the east. This particular storm flowed in a south to north pattern, and it did not move inland.

Jim Hill commented that the upper Chehalis was a debris flow as well as a flood. He suggested that it had the characteristics of a lahar as much as a flood. Lahars are usually associated with mountains. This event looked like a lahar because of the debris and sediment. He suggested posing the question for further review. Mr. Zachmann replied that the event had some similar characteristics of a lahar. However, lahars usually involve big rocks and glacial sediment, whereas this event had woody debris and sediment.

John Penberth suggested the lower readings provided a more accurate count of the total rainfall. There was a loss of 10 bridges caused by a large slide. After the slide moved past Doty, everything started to spread out. He suggested it was difficult to blame the event only on rainfall because there was a major slide involved. The slide contributed to tributaries backing up.

Mr. Zachmann pointed out that the rain gauges remained intact and provided accurate information.

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An unidentified citizen questioned whether there was an upward or downward weather pattern for the Chehalis Basin area, and whether there has been any stream flow analysis undertaken. Mr. Zachmann replied that there is no way of accurately predicting weather patterns. Studying available data is the only way to monitor weather patterns. Stream flow patterns vary from year-to-year based on numerous climate factors.

Kahle Jennings acknowledged that he's not a hydrologist or a meteorologist and questioned whether the basin has been in its present form for 2,000 years. Data are only available for the last 100 years equating to approximately 1% of data attributed to the basin over time. He indicated he doesn't believe there is sufficient data in the basin to make predictions. Mr. Zachmann responded that the department works through adaptive management by making the best decisions based on available information. He invited members to ask questions.

FEMA Flood Study

Mr. Johnson reported his company is a private engineering firm. The firm specializes in river engineering. The company employs approximately 120 people worldwide who deal with problems associated with rivers and streams.

Mr. Johnson reported the company is a consultant to FEMA. Frequently, the company is asked to update flood insurance rate maps. The primary purpose of the maps is to identify areas that are at risk of flooding and to help establish actuary insurance rates. This ensures property owners or purchasers of such land have federal backed flood insurance.

Last year, FEMA asked Northwest Hydraulic Consultants to update the flood insurance rate maps for the lower Chehalis Valley area to include the cities of Chehalis and Centralia extending from Mellen Street upstream to Adna and beyond as well as including tributaries in the areas.

FEMA requested the update because current flood maps do not properly represent actual flood risk areas. The U.S. Army Corps of Engineers was also undertaking a study to develop a numerical model of the Chehalis River system. The Corps provided its model to FEMA to use to update the area flood maps. In order to update the flood maps there has to be a numerical computer model of the river channels so a prediction can be made for water surface elevations for a regulatory event. The event was the 1% flood or the 100-year event.

The Corps produced the model and Northwest Hydraulics Consultants was in the process of updating the flood maps when the December 2007 event occurred. The project came to a halt with FEMA requesting the addition of data from the December 2007 flood. Presently, the process of including the data is underway. There are new FEMA maps that are under development for the lower Chehalis Valley area. Preliminary maps should be completed in the latter part of 2008. Tributaries will also be covered by the maps.

Michael Golden questioned whether flood levels were considered based on a historical event or whether the map is based on the 1% flood involving all tributaries concurrently. Mr. Johnson replied the effort involves preparation of a map showing the elevation of the 1% chance of a flood at all locations within the basin. It's not a particular event that is modeled. The intent is to establish water surface elevations at any point that would represent a 1% chance of flood at a specific location.

Mr. Golden asked if it accounts for different tributaries affecting each other. Mr. Johnson replied that FEMA requires treating each tributary independently. For example, FEMA wants to represent a 1% flood

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on the South Fork by itself, regardless of whether a 10-year event occurs on the main stem of the Chehalis. FEMA will consider the higher flood level of the two elevations and increase the water level on the map.

Mr. Johnson reported Northwest Hydraulic Consultants was retained by Lewis County to look at the December 2007 event and comment on the impact of the Corps' Flood Control Project. Given the observations of the December 2007 flooding, questions were raised about whether the Corps' project should be reevaluated and refined prior to rendering any decisions on flood control construction.

The 2007 event significantly differed from the Corps' design plan. The issue is what impact might that have on the reliability of the Corps' plan and whether any refinements are needed. Mr. Zachmann shared information on the comparisons between the 2007 event and the 1996 event. Those were very different floods. The Corps' project did not have many big flood events to look at in terms of the characteristics of how flooding occurs in the basin. The Corps did not have much data to use regarding large flood events in the Chehalis Basin. It must be known where water is coming from and how it is going to come down the valley in order to design a successful project.

Laura Orr, U.S. Army Corps of Engineers, reported the Corps did not only look at one event. The Corps considered the entire basin area. The model was based on data that was available.

Mr. Johnson reported the Corps put a lot of emphasis on the 1996 event to try and determine what an event in the future might look like. He displayed a graph showing flood discharges and the magnitude of a 100-year flood event at several locations throughout the basin. The table showed that there would be 31,600 cfs (cubic feet per second) in Chehalis at Doty, the Chehalis River at Ground Mound would be 74,100 cfs, the South Fork would be at 9,605 cfs, and the Skookumchuck River would be at 10,750 cfs. The 1996 event had discharges very similar to the estimates that were drawn up. In 1996, the peak discharge at Chehalis at Doty was 28,900 cfs, Chehalis River at Ground Mound was at 74,800, South Fork was at 9,000, and the Skookumchuck River downstream of the dam was at 9,020 cfs. The 1996 event in all those key locations in the watershed were very similar to what was estimated for a 100-year event.

Mr. Johnson displayed similar information using the data from the 2007 event. Chehalis River at Doty was 63,100 cfs. This was more than double than what was predicted. Chehalis River at Ground Mound was at 79,100 cfs, and the South Fork was at 19,500 cfs. This was the area that had some sediment problems. The Skookumchuck River was at 2,210 cfs.

An unidentified member of the audience asked about the probability of tracking a storm with the same south/north weather pattern and whether anyone looked at the unusual storm pattern. Mr. Johnson advised that the question pertains more to the meteorology experts. The Oregon Climate Center has data on rainfall intensity. The rainfall intensity in a 24-hour period is when most of the flooding occurs. Mr. Zachmann added that data are being analyzed for predicting future three and five-year weather patterns. However, there is no accurate way to forecast future weather patterns at this time.

Ms. Willis asked whether FEMA maps will be revised because of the change in information caused by the most recent event. She asked whether the maps will show the 100-year floodplain with the numbers accumulated from the 2007 flood and will it change the requirement for increasing building foundation height in that area. Mr. Johnson advised against jumping to the conclusion that the 2007 event represents a 100-year flood and that maps will reflect the evaluations for the 2007 discharge. The 2007 discharge will be considered in the re-analysis of the 100-year event. It is unknown at this time, what the revised

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100-year event will be for the Chehalis River at Doty. It is one of the biggest challenges facing residents in the river basin. There is a very limited slice of data and insufficient recorded discharge data.

Mr. Johnson referred to the difference in the 2007 event and the numbers that were generated for the 100-year discharge. When the Corps completes its analysis to estimate how high the levees need to be, a risk and uncertainty analysis is performed using computers to determine the potential for water levels. The Corps establishes the crest level of the levees with confidence that water will not over top the levees.

Mr. Orr commented that if the project moves forward, the Corps will reevaluate everything. Data from the 2007 event will be added to the model to ensure levees are sized adequately to handle flows. She noted the 2007 event may not change the height of the levees as the levees are sized for a 100-year event.

Mr. Golden asked how a levee for a 100-year event can be designed when the 100-year flood maps will be changed. He asked how long it will take for FEMA to produce new flood maps and whether it's possible to design the levee without the maps. Mr. Johnson said FEMA is required to produce a set of maps for the existing condition. FEMA believes the maps for the Chehalis River basin are out-of-date and do not truly account for the existing flood risk. FEMA is moving forward to develop new flood maps, which will likely take several years. The maps will remain applicable until the Corps' project is constructed. Ms. Orr reported the Corps will be coordinating with FEMA to model a 100-year flood control project.

Mr. Johnson referred to the Skookumchuck River. There was substantial discharge during the 1996 event whereas in the 2007 event, there was little discharge into the Skookumchuck River. There were some assumptions in the Corps' project for flood protection for modifications to the Skookumchuck River Dam. Ms. Orr said the Skookumchuck River Dam is a part of the flood control project. Mr. Johnson noted that more water passed through the Mellon Street Bridge during the 2007 event, which should be considered in the design of the flood control project.

Ms. Orr said there is risk and uncertainty associated with levees. The Corps considers 90% risk and uncertainty. There are additional materials for compaction placed on the levees. Levees are usually a little higher because of the risk and uncertainty factor than originally engineered. Mr. Johnson said the Corps' project is certified to carry a certain quantity of flow. Statistics change and the project may not be sufficiently sized to hold a 100-year flood 10 years from now. Ms. Orr replied that the Corps is using best available data to ensure the federal government's interest. The Corps cannot build a project on hypothetical situations.

An unidentified audience member asked whether the Corps will take the previous project design and add the 2007 storm results to the model to determine new data. Ms. Orr replied the model is based on a 100-year flood. The models are used to build the levees and they are run to determine outcomes. However, levees do spill over and breach. Levees are constructed to reduce the risk of flooding rather than preventing all flooding. The risk of flooding still exists.

Mr. Johnson reported that when FEMA produces a flood map and a levee exists, FEMA will not consider the levee as providing flood protection unless the levee is certified as being structurally sound for a 100-year flood.

Centralia Flood Control Project – Overview and Questions & Answers

Ms. Orr reported she is the Project Manager for the Centralia Flood Damage Reduction Project as well as the Chehalis project. Currently, the project is in the feasibility stage to ascertain the planning and

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formulation of a project. The Corps develops a project providing the best possible benefits with the most cost efficiency for the federal government. The projects cannot have a cost ratio larger than 1%. The Corps working closely with Lewis County, developed a plan, and was able to seek authorization for planning, design, and construction. The Corps receives its authorization through the Water Resource Development Act (WRDA), which typically involves a two-year process. However, for the Chehalis project, it has taken seven years for another WRDA to come forward. The project is authorized for \$124 million, which includes the \$13 million expended by the Corps and the sponsor to develop the plan and complete the modeling. The federal cost is approximately \$75 million. The non-federal contribution is \$49 million. The cost share ratio is 65/35 because of a feature to raise the levees on the Skookumchuck Dam to a 100- year protection level, which could not be justified. The additional height of the levees is considered to be an extra benefit to the community. The community is paying for the additional amount.

Project focus was not just on the Chehalis and Centralia area. A larger area of the basin was considered as well. The areas considered included modifications to the Skookumchuck River Dam, floodplain modifications, such as a bypass at Mellen Street, evaluation of the levee system, flow restrictions in the river, and non-structural alternatives, such as raising buildings and houses. The federal government looks to the cost to benefit ratio of the plans.

The project in the General Reevaluation Report includes the Skookumchuck Dam with 11,000 acre-feet additional storage, which includes a bypass tunnel with gates. The federal government has strict guidelines as to what may be modified on a dam. The project is at 35% design. Skookumchuck and Chehalis River levees have a 100-year protection plan. There are eight residences where the structures may be raised. However, existing structures will be reevaluated because of changing conditions since the information was originally modeled. The design time for the project is two years with construction occurring over four years.

Ms. Orr displayed modeled maps showing where flooding would occur during a 100-year flood and where levees will be constructed or modified.

Mr. Harris remarked that much of the project involves the protection of Interstate 5. Ms. Orr replied that 20% of the project benefits Interstate 5 with 80% protecting the cities of Chehalis and Centralia. Mr. Harris asked how the design will prevent water from flowing backwards and filling areas behind levees. Ms. Orr replied that in areas of concern there will be pump houses placed. The Corps will be working with City engineers to properly place pump houses.

Mr. Harris referred to Dillenbaugh Creek and the flow that spilled over onto Interstate 5 and filling the levee from behind. He asked how holes within the levee system will be handled. Ms. Orr replied Dillenbaugh Creek has been discussed and will be refined during the process. Dillenbaugh, China Creek, and Salzer Creeks will be reexamined.

Glenn Carter questioned whether there is federal interest in developing protection in rural areas throughout the Chehalis Basin. Ms. Orr reported the federal government does not want to induce development of the floodplain. However, there are programs for isolated, smaller communities where a cost ratio benefit can be attained. Unfortunately, agricultural land does not have high value needed for justification of constructing a multimillion-dollar project. Mr. Carter reported there are other federal funding sources available under the Department of Interior and the Bureau of Reclamation that could be funded outside of the Corps for a reclamation project that satisfies those standards. Ms. Orr acknowledged there are other federal agencies that could provide funding assistance. During the re-

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analysis of the project, the Corps will consider the cost to benefit ratio because of new data and the possibility of underestimation in the original data.

Mr. Jennings asked whether the project will cause harm outside the cost to benefit ratio or whether mitigation is required. Ms. Orr reported one of the goals of the project is not to induce damages upstream or downstream. In the past, many federal projects have caused damage. The Corps is undertaking another General Investigation Study for the entire basin that includes ecosystem restoration to include Grays Harbor. The study has the authority to look at flood damage reduction. The study is still within the feasibility phase. The federal government can look at the basin as a whole. A number of alternatives were considered in the Corps' project to increase the ratio. However, a basin-wide study would include Pe Ell and Adna.

Mr. Jennings asked about additional risks to other homes if the levees are raised. Ms. Orr replied that the Corps will consider new data and the homes that may be affected.

Ms. Willis said that if the Corps' project creates other damage, the Corps has already indicated that agricultural and buildings are not included in the protection and that the Corps does not assign a value to live animals. She asked whether that means agricultural buildings that were raised and then become inundated with flood waters containing animals might have survived under previous conditions. Ms. Orr said the Corps will need to run the model to see which buildings are inundated. Increasing the height of building foundations is usually justified for houses. She said she is unsure if agriculture buildings are raised because of the cost to benefit ratio. Ms. Willis asked that the Corps consider damages to agriculture buildings that may be inundated because of the Corps' project protecting the urban areas. Mr. Orr said she will follow-up with the economist regarding the question.

Mr. Johnson advised that there is a section on agriculture within the Corps report that speaks to the value of lost crops, buildings, etc. It is being considered at some level. Ms. Orr said it's difficult for the Corps to justify levees for anything other than an urbanized area..

Mr. Golden asked whether property owned by the cities and county located behind the airport will be protected by the levees. Ms. Orr offered a contact name to answer questions on the protection level provided by levees.

Mr. Golden asked about the probability of a shortfall in project funding midway through project construction. Ms. Orr said after the project is 100% designed, the Corps will have the total project cost. The authorization is based on pricing from 2003. However, if something does happen then the Corps will have to work through the issues. The Corps believes its estimates are accurate based on previously constructed levees and the completion of 35% design. Mr. Golden asked whether the federal government commits to completing the project. Ms. Orr said if that occurs, there will be an additional cost share at the end of the project.

Ron Schillinger asked whether the Corps has evaluated the impact levees may have on the cities of Montesano and Aberdeen. Ms. Orr replied that the model evaluates water leaving the basin. The Corps considers upstream as well as downstream impacts. The Corps considers a zero rise in the river. Mr. Johnson added that the model that was developed is called an unsteady hydraulic model. As the flood levels increase because of the loss of floodplain storage in the upper watershed, the model evaluates downstream impacts.

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Mr. Schillinger inquired about the staffing level within the Corps especially with respect to other natural disasters occurring throughout the US. Ms. Orr advised that she's been assigned to the project. The project is one of the District's top priorities.

Mr. Harris asked about the impact to the new wastewater plant caused by a new levee system. Ms. Orr advised that she's unable to address the question. During the next phase of the design, it will be important that the cities be a part of the design team to work through those types of issues.

Mr. Swartout referred to the ecosystem restoration project, which is a project that Grays Harbor has sponsored involving the CBP. An important element of the CBP's Watershed Plan is the hydrologic study involving modeling a MOD flow showing the interaction between groundwater and surface water. He asked whether there is any advantage to having the modeling completed to assist in providing data for the Corps' project. Ms. Orr acknowledged there would be advantages of having data on the interaction between groundwater and surface water.

Mr. Hill said that it appears based on the information; the area will need to look beyond the Corps for a basin-wide solution, such as impacts to agriculture. Ms. Orr said the Corps can participate in the ecosystem restoration project and looking at flood damage reduction projects and what will and will not work in specific areas. When the Corps considers plan formulation, it considers all ideas and not just what the Corps can do. There are other federal agencies willing to help with grants and funding assistance.

Mr. Penberth commented on his displeasure of statements by others condemning the Corps. U.S. Army Corps of Engineers Headquarters in Washington, D.C. increased the funding request from \$180 million to \$220 million, with an emphasis that it didn't include a 20% override. He offered that the renewed effort is not a re-recreation of the work but an increase in the height of the levees. He offered to provide gravel to increase the height of the levee to avoid spending millions of dollars. Ms. Orr replied that the government will pay for additional gravel if necessary. However, after design and construction has been planned, there are limitations on what can be altered within the plan. The requirement limits changes to 20%.

Mr. Swartout asked members to consider what information should be provided at the next meeting. Many questions have been asked that haven't been answered by the presenters.

Ms. Orr reported when the project agreement is signed, the Corps will update the hydrology, cost and benefits, reformulate mitigation, and initiate other design considerations in terms of local creeks.

Ms Willis asked about the original mitigation sites. Ms. Orr offered to follow up with Ms. Willis and provide the information. The Environmental Impact Statement identifies mitigation as well.

Lyle Hojem reported in the early 1930s, there was a high tide and an inflow of heavy rain with the Skookumchuck River peaking concurrently with the Chehalis River in Centralia. The North, Middle, and South Fork all peaked simultaneously resulting in a severe flood. The rainfall was inconsequential compared to the simultaneous occurrences of the other factors. In the early 1940s, the federal government constructed the airport dike. The airport dike with pumps worked effectively until it was breached by development. Currently, the region is experiencing the construction of buildings encompassing 20 acres in size accompanied with five to 10-acre impervious parking lots. Rainfall today peaks quickly. The upper reaches of the basin remains basically the same as it is still in forestry and unurbanized. However, the lowlands have experienced a change in how water is distributed. Lowlands experience a high and fast

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peak. It will be a continuing problem. The areas of Adna, Pe Ell, and Doty experienced severe flooding. As the water reached Galvin Road, it was approximately three inches higher than it was in the 1996 flood, and leveled off from that point all the way through Thurston and Grays Harbor Counties. More serious impacts occurred west of that location. The North Fork of the New Newaukum crested earlier. Each flood produces different situations. What needs to occur is serious consideration about initial flows. In the Midwest, flooding lasts 10 to 14 days. In this region, flooding peaks with water dissipating quickly. The solution needs to consider the peak period.

Chair Canaday commented on the opportunity that the region has never had through the Governor's efforts to step forward and sign several bills. There is an opportunity to pursue efforts for everyone. The funds will help to secure additional funding to pursue flood control projects. Ms. Orr added that the federal delegation for the region is also pursuing funding for the project.

Mr. Connelly asked whether previous study information is available to review. Ms. Orr said the information is part of the feasibility study. She offered to provide contacts for obtaining some of the information.

Mr. Swartout thanked Ms. Orr and Mr. Johnson for their presentations. Ms. Orr invited members to contact her with any questions.

Next Meeting

Chair Canaday asked for feedback on the next meeting agenda.

Mr. Hill asked how the information will be used by the Partnership. Members have discussed the role of the Partnership, which still needs to be determined.

Mr. Swartout asked whether members are interested in the concept of considering a basin-wide approach. Currently, the Ecosystem Restoration Project resides with the Partnership. He asked if that project should be considered in conjunction with the basin-wide approach. The \$50 million allocation from the Governor includes \$2.5 million.

Mr. Hill asked about the status of forming the executive committee. It appears Lewis County is the lead. He requested an update on the executive committee and the discussions involving the formation of the flood control district.

Mr. Penberth referred to the tri-county effort and suggested receiving an update from all county commissions.

Mr. Swartout advised that a three-county meeting has been scheduled to discuss the potential for establishing a Flood Control District. The meeting is scheduled on April 14, 2008 at 6:00 p.m. at the Thurston County Courthouse in Building 1. Lewis, Grays Harbor, and Thurston County Commissioners will be attending.

Mr. Jennings requested more information on "One Voice." He asked about the group's interest/focus and identity of the group's members. Mr. Hill suggested that in the interest of time, the Partnership should invite Mr. Hendrickson to attend a meeting and provide an update.

Mr. Swartout suggested the Partnership should review its role regarding a basin-wide project.

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Ms. Wick advised that the Department of Natural Resources is looking at the Forest Practices Act in terms of logging on steep slopes and that the rules may be revised. The Partnership may want to offer public comments during the public hearings on the Forest Practices Act.

Ms. Napier reported May is "Water Quality Student Month." Students will attend the CBP's May meeting. A logo contest will also be held. Mr. Lehr and Dave Rountry are providing an update on the Water Quality Monitoring Program in relationship to TMDL implementation. The May meeting agenda is full at this time. Students from Aberdeen and Montesano High Schools will attend and provide presentations.

Mr. Hojem commented on bad water quality within the Chehalis River system. He said he's never seen the river in such bad condition for such an extended period.

Adjournment

With there being no further business, Chair Canaday adjourned the meeting at 12:02 p.m.

Prepared by Danielle Gardea/Valerie Gow, Recording Secretaries
Puget Sound Meeting Services.