

**Flood Authority Work Session
Veterans Memorial Museum
February 19, 2009 – 9:00 A.M.**

1. Convene Work Session

Mark White, Chehalis Tribe, called the meeting to order in Commissioner Averill's absence at 9:10 A.M.

2. Introductions

Self-introductions were made by all in attendance.

Ms. Linda Hoffman asked Dave Carlton to talk about the temporary changes in management.

Mr. Dave Carlton stated Mike Sharar is progressing but staff does not anticipate his coming back for some time, hopefully this summer. ESA will be going forward; Mr. Carlton is project principal and that has not changed. Ms. Ann Root will help pull together the Flood Hazard Management Plan (FHMP); Mr. Spencer Easton is still involved with interviews and keeps staff on task and organized. Ms. Hoffman is involved with interviews also, as well as with the facilitation and coordination of meetings.

Ms. Hoffman gave some background on herself. She has been part of the team since its beginning with the Authority. She has 30 years experience in State and local government and sees her role as staff to the Authority to help get to decisions and support the Flood Authority.

3. Authority Agenda Setting Process

Ms. Hoffman explained the agenda process. The first step is for the consulting staff to put together a first draft of a meeting agenda based on an overall work program and schedule: what needs to happen month to month. At the end of each meeting of the Flood Authority there is an item that asks for requests from Authority members for the next meeting. The next step is to take these items to the Board Advisory Committee (BAC) which includes Lee Napier, Bob Johnson, Glen Connelly and Mark Swartout. The BAC reviews the agenda, adds to it if needed, talks about whether a particular item is timely, and then sends the recommended agenda to Chairman Averill for approval. Chairman Averill approves the agenda for the next board meeting. At the beginning of each business meeting there is an opportunity for review and approval of the agenda and at that time a member may bring up a concern and amend the agenda if necessary. At the end of the meeting one may raise issues for the next agenda. The BAC talks about the agenda at every one of their meetings and they have two BAC meetings in between each Flood Authority meeting. If any Authority member wants to get an item on the agenda, he/she can tell Ms. Hoffman, a staff or BAC member or Chairman Averill. There is not a desire to limit what goes on the agenda but there needs to be a process to work through it.

Mr. Dan Thompson asked if there is a cutoff day.

Ms. Hoffman tries to get Mr. Averill's approval the week before the scheduled meeting and the earlier the better. The BAC meets the Friday after the regular meeting and the Monday before.

County Commissioner Schulte asked if we heard a bill was to come out in the Senate such as a flood control stimulus packet, could it be put on the agenda.

Ms. Hoffman stated that would be an example where at the beginning of the meeting you could add it to the agenda.

Mr. White wanted the agenda process brought up because he has an issue with one jurisdiction possibly having control over the process.

4. Project List Workshop #1

Ms. Ann Root stated the first step is working on a project list that will eventually become the list of projects to come out of the FHMP, starting with Chapter 8, the development of mitigation alternatives, and Chapter 9, recommended actions. Ms. Root went through the PowerPoint.

During the November workshop an outline of the comprehensive work plan and mitigation alternatives were discussed. FEMA requires a broad range of mitigation alternatives. The mitigation alternatives include non structural measures and structural measures. Ms. Root had examples of these on slides.

Mr. Carlton explained the process for developing a prioritized project list. On the slide the yellow portion are the problems or what we are trying to accomplish. We are not concentrating all projects in one area. In general there is a certain set of projects that can be done to alleviate flooding on a road, etc. Since we can't deal with everything at one time the criteria list gives a way to determine what the highest priority might be, such as the number of people blocked off during flooding, etc. This allows for smaller projects to get done while we are studying the bigger issues.

The blue section is the solutions, or mitigation alternatives; specific project starter list; list of projects and proposals: what does each project do? Some criteria would include cost; benefits, etc, then we will come up with a prioritized project list and a capital improvement program.

The flood last month opens the opportunity to go back to the State and FEMA to ask for grant money for mitigation projects. The Flood Authority may want to support that. For example, Oakville wants to enlarge three or four culverts. That may be something we could help with through a grant proposal.

Mr. Ron Schillinger stated when the sun and moon and stars align, the crest comes and there is a high tide and input to the Satsop and Wynoochee comes all together it makes a huge difference in the height of the flood. The WWTP sits almost at the confluence of the Wynoochee and the Chehalis. The engineers told us to build that up on fill, which we

did, and it has been fine, but it was scary to see the mark on the wall that showed if the level of the water had been 2-3 inches higher the whole facility would have gone under. We ought to consider a permanent sandbag around the edges to keep the pressure off.

Mr. Carlton stated that is something that could go forward to FEMA but must go through a cost analysis first. A way to justify it is showing historic damage or a flood map that says you should have had historic damages.

Mr. Jim Cook stated he agrees with the alignment. In Aberdeen in 2007 and again in the most recent storm we were extremely fortunate that the time frame worked out that it was not at peak high tide. There was only hours' difference between the flooding and a total catastrophe.

Ms. Hoffman stated this is a flow chart you will see frequently and we want to use it to ground you for each meeting, to show where we have been, where we are now and where are we headed by June. You should see this as the process we will be following with you.

Mr. Carlton stated this is iterative. After you have a final plan, every few years you come back to see what you have accomplished and see what you need to change. Just because it does not show up now as a problem doesn't mean it will not come up next year.

Ms. Hoffman stated this is a Capital Improvement Project (CIP) and other forms of improvement as well. Just like the jurisdictions that have an annual process for road improvements, etc, you go through the regular process to update your list of projects and then next year you update it again.

Mark Swartout stated he hopes everyone is submitting something for the list. He asked if a project is put into a FHMP would it qualify for more grant opportunities.

Mr. Carlton stated it would increase the priority. Projects need to be in an approved mitigation plan.

Ms. Hoffman stated funding for the previous session is conditioned on having prioritized projects lists approved. That is another pot of money that is accessible through this process.

Mr. Carlton stated the prioritized list goes through the CIP. The basin study will be done in 2-3 years with the projects in it and then you need to come back to this document to change it.

Mr. Schillinger stated there is nowhere that a cut off time is stated.

Mr. Carlton stated Ms. Root would appreciate them sooner rather than later, but this is a continuing process.

Ms. Root continued on to the next slides: Public Information, Regulations, Planning and Data Collection, Flood Damage Reduction, Emergency Response and Preparedness, Floodplain Protection, Bank Protection, Conveyance Capacity, Natural Resource Protection Projects

Question: What are gabions?

Answer: Rock cages that hold rocks

The next slides show the list of projects already identified in existing FHMPs, new projects submitted on the form provided and the list we compiled from the public meetings last week.

- Existing CFHMPs: Projects identified in existing flood plans. This is the beginning of the starter project list and copies were distributed.
- Regulations outlined for jurisdictions
- Planning and Data Collection – almost everyone has identified the need to collect additional data regarding flooding, with some very specific ideas in some jurisdictions. There is not a lot from Thurston County as Mr. Swartout provided a list of projects already accomplished.
- Flood Damage Reduction
- Emergency Response and Preparedness
- Floodplain Protection – some are Corps projects that the jurisdictions are cooperating with. (Thurston Co projects should be deleted).
- Bank Protection
- Conveyance Capacity – no projects identified in FHMP but identified by public (dredging)
- Natural Resource Protection Projects

Mr. Schillinger asked the difference between flood damage reduction and flood plain protection.

Ms. Root stated non-structural is for reduction; levees, etc would be for protection.

New Projects Proposed by Flood Authority Jurisdictions

Ms. Root encouraged jurisdictions to fill out the form and send it to her so the information gets on this list. The list so far is rather short.

New Projects Proposed at Public Meetings

Ms. Hoffman distributed the list.

Commissioner Willis suggested giving tax breaks to people who remove things from the flood plain.

Mr. Schillinger stated there was concern regarding the operation of the Wynoochee Dam, which is not structural, as well as the communication process. Where would that fit in, for any dam?

Mr. Carlton stated it should go into flood damage reduction.

The slides of new projects proposed by the Public:

- Emergency Response and Preparedness
- Flood Plain Protection
- Bank Protection
- Conveyance Capacity (not in existing plans but public brought it up)
- Natural Resource Protection Projects

Ms. Hoffman stated ESA will refine the lists from last week's meetings.

Mr. Schillinger said congratulations were in order on getting that done: it means progress.

Ms. Root reminded everyone she wants to add projects and encouraged everyone to please fill out the project form.

Ms. Hoffman stated there is not a project form for every project. This is just the beginning of the project list. We would like a form for all the projects that come on, especially information about what the project is intended to address. Remember the flow chart. We are inventorying the problems and solutions so you will get information about the problem and solutions relevant to solve it. We will be continually adding projects until we narrow the list.

Mr. Swartout asked about feasibility regarding criteria to establish which projects are prioritized. From a regulatory standpoint, something that is high cost to low benefit, etc, should we develop criteria to prioritize the list? Rather than focus on projects should we focus on criteria?

Mr. Carlton asked if you had to pay for it yourself, would you do it. The Corps cost effectiveness model usually takes in things like economics. It does not take into effect pain and suffering, which is quite large. Another criteria is can we get it permitted? Can we get other agencies to help us pay for it? Does it have other benefits besides for flooding; for example does it reduce flood damages and help fish in the basin and how many people does it benefit. DOT has high interest in I-5 so they could help there. You need to choose your partners.

Ms. Hoffman stated we won't have the same level of information about the projects in the starter list. The consultants and the Authority do not have the time in the next few months to do a feasibility analysis on all these projects. You need to screen and prioritize for both problem and projects and which problem areas will you focus on, and not necessarily forever. This is a continual process and you need to focus on certain problem

areas and you will focus on certain types and levels of projects and the criteria are for purposes of getting there.

Mr. Swartout stated he really appreciated the public's attendance and their engagement. When we are done, would the citizen who suggested a project see the outcome - if it was accepted or why it did not make the list. The public is very aware of what we are doing and we should be accountable for all the decisions we are making.

Mr. Schillinger thought we would be going back to the public. Once we have the draft plan we will go back to the same places and present the plan publicly. That would be a logical opportunity.

Mr. Carlton stated sometimes we do take the plan back and open it up again but frequently we do not. We track every suggestion but how do we deal with each one of them? We have list of things to do and how does that solve problems in the basin and which ones do we like.

Commissioner Willis stated that the list distributed gave each suggestion a value of what the person said and they can see how many other people said it. She agrees with Mr. Swartout; this is a valuable tool.

Mr. Carlton stated someone wants to have a river dredged and we need to look at that through the process.

Ms. Hoffman stated the summary of the public meetings, flip charts and meeting notes would all be posted on the website. We will have a way to track what happens to those ideas and report back as to whether or not they made the cut and if not why not.

Mr. Johnson suggested two project lists, one of small and incremental projects that could be funded locally. He did not believe it was advisable to have all the focus on large projects that will take years. Small projects such as culverts, overlays acting as dams where roads might be taken out, local jurisdictions can do these on a short term project list.

Mr. Carlton thought there should be only one list, but agrees with not focusing on a single solution. We can go after FEMA money for the types of things Mr. Johnson is talking about. There are things that the Authority cannot agree on yet, but there are small things that can get done.

Commissioner Schulte suggested instead of saying something is not permitted, say it needs legislative changes. If you are saying dredging, you can put that down as a required legislative change.

Mr. Carlton stated for dredging it is the mitigation that you have to go through.

Commissioner Willis stated nothing was sent in for Grays Harbor for the project list.

Ms. Napier stated Grays Harbor County is proposing gauges and that the Partnership would be submitting proposals regarding groundwater interaction and economic analysis.

Commissioner Willis would like to add a gauge just below the Wynoochee. River braiding would help with erosion and fish passage. The river has encroached on the water system and rock was used to keep the river from eroding. In the old channels the river was braided and it went out through the migration area. Now a serious flood will send all the water into the facility where riprapping was the choice of mitigation. Instead of doing that, look at surrounding areas and open some overflow channels (log jams) so when the water comes next time only a portion goes there. In most cases there is no housing, so sending the water out there harms no one. We did it on the Satsop and suggest doing it on the Quinault; possibly on the Wynoochee. These are inexpensive projects. We could also do small culverts on Quinault Rd and Hiram Hall.

Question on projects – do they have to be on the Chehalis River?

Mr. Carlton stated they can be on anything in the Basin.

Commissioner Willis stated that within the city limit there is a flooding issue and the water overflows into the county. A resident there has a drainage problem. Would that type of project fit?

Mr. Carlton stated no judgments have been made on that yet.

Commissioner Willis would like to include that. Also opening the migration zone and removing manmade obstacles in the Satsop. (form for that to follow)

Mr. Schillinger wanted to add a quarter mile of Chehalis River bank protection at Mary's River Lumber, Montesano and the dredging of Lake Sylvia behind the dam.

Ms. Napier would like to see a proposal for economic benefits for floodplain areas. What is the geographic area? Humptulips has not been described.

Mr. Carlton stated everything that drains into the Chehalis River.

Ms. Napier stated when you say watershed you eliminate the Humptulips.

Mr. Swartout stated we have talked about the upper and lower Chehalis and that does not include Humptulips. If we deal with all tributaries to the main stem, it should include the Humptulips.

Mr. Carlton stated that may have to be taken up with Authority members.

Mr. Cook asked when does it cease to become the river and becomes the Bay or harbor?

Mr. Carlton stated the consultants are keeping it open to the watershed but at some point the Flood Authority will need to determine how much we will include.

Mr. White suggested that structures and fill on the floodplain be heavily taxed.

Ms. Julie Powe noted a comment was to improve the flood water flow under Highway 12 and it should be Highway 6. She also stated the building of dams for water retention designated the lower basin and she would like it to include the entire basin.

Ms. Hoffman recessed the meeting at 10:40 and reconvened at 10:55.

Summary of additional projects:

- Tax breaks
- Penalize for building on flood plain
- Coordinate operation of Wynoochee dam
- Add gauge below Wynoochee dam
- River braiding Wynoochee, Satsop – open old migration channels
- Culvert projects on Hiram Hall
- Montesano/GHC Camp Creek drainage improvements
- Open mitigation zone of the River – remove or mitigate man-made obstacles in Satsop (will submit form)
- ¼ mile Chehalis River bank protection at Mary's River Lumber, Montesano
- Dredging of Lake Sylvia
- Groundwater/surface water retention
- Study economic benefits of ecosystems in the floodplain
- Improve floodwater flow under Hwy 6
- Water detention in the Basin

Commissioner Willis would like system gauges added and asked if more rain gauges are needed.

Mr. Carlton stated gauges are a part of the ongoing projects.

Commissioner Willis stated the fairgrounds are used as an evacuation point for people and animals and it could use a generator. It could be used as an emergency station to feed and house people. There is the capability of housing a herd there if necessary.

Mr. Schillinger would like to raise the height of the Montesano treatment plant by putting a dike around it. He would like the formation of a flood district on the project list.

Mr. Johnson stated we need to address livestock loss. Where can farm animals go?

Ms. Powe suggested developing a list of farms that have extra room where people could go and have an evacuation plan for animals.

Mr. Carlton asked if loss of power was an issue anywhere.

Mr. Johnson stated some telephones went down as well as some cell service.

Mr. Tony Briggs stated in 2009 along the Newaukum we did not get rainfall like we did in 2007 and 1996. We had the greatest flooding we've seen and that was caused by the snow pack. Usually snow is not a problem. As a predictive way to understand the potential could we look at snow levels in specific regions in the Basin and determine an average and figure out what we have now. With additional rain you could model it to see the levels you can predict in tributaries. If we had the same type of rain as in 1996 we would have seen much more flooding than we did.

Ms. Root stated we are looking at the Snotel.

Mr. Roger Fish stated Trans Alta has the Skookumchuck dam but also large capacity holes in the ground at the mine. Those areas could be used for storm water storage in the Hanaford basin as another retention alternative.

Ms. Root stated this is an on-going process. Submit forms and we will be back with project lists in the future.

6. Study Area Characteristics

The preliminary version of Chapter 2, 3, 4 of CHFMP have been sent out. These are based on existing plans and there are more things that need to be added. We anticipate one more major revision of these three chapters and then some minor tweaks.

Chapter 2: General Study area – We relied on WRIA plans and existing studies on fish and habitat conditions. We do not have the figures done yet, wetlands have scattered coverage and the socio economic section is thin. Please read through these and let us know of any gaps or errors.

Commissioner Willis asked if this information came out of the CRB Partnership. Ms. Root stated it did.

7. Regulatory Overview

Chapter 3: Regulatory Overview – Federal and State regulations and local jurisdictions regulations are portrayed in tables. We will work on formatting. The last part will be compiling regulations that each jurisdiction has.

Mr. Carlton stated the Federal regulations apply to what we can and cannot do in water issues such as dredging and log jams. The programs must be applied for. It helps with what we can do within the flood plain to help ourselves. Some keep you out of harms way. At the state level you could take it to your legislature. Look at different communities to see how they do prepare and not prepare.

Ms. Root stated Table 3 summarizes what the flood plain regulations are for all jurisdictions and it is nearly complete. There are still some questions that need answers and we will work on those.

Mr. Swartout stated the flood plain manager does review those.

Ms. Root stated we can include the CRS status (community rating status).

Table 3.2 is related to regulations such as critical areas ordinance, shoreline master programs, storm water management. We need more information. In 2011 you will need to update the shoreline master program.

Mr. Swartout stated in Thurston County it is the Critical Areas Ordinance that restricts building in the floodplain, not the FHMP.

Ms. Root stated we need to determine how to distinguish that. Should there be standardization for some of these things?

8. Previous Studies

Chapter 4 – Previous Studies; summarized plans

Mr. Swartout stated there is lack of clarity for the Skookumchuck dam modification which is still part of the Corps project. Page 4 under follow up, last sentence: Mr. Swartout understands it is still in as a project. We may want to refer to the later effort.

Ms. Root stated this was done chronologically so we will clarify that.

Ms. Napier stated there is a lot of work on the upper basin. What about downstream?

Ms. Root asked if there are things that are missing. We do want to include downstream.

Ms. Shirley Kook referred to page 15 regarding the Toledo WWTP. It discharges into the Chehalis, not the Cowlitz.

Ms. Root stated she needs information to fill in and wants to know if there is something wrong.

Mr. Fish asked if there is a timeline for these projects and are they implemented or just studied?

Ms. Hoffman stated this is an ongoing process and asked to keep comments coming.

Mr. Carlton stated there is work proposed on flood control structures in the Basin. If anyone has maps with GIS data he would appreciate getting them.

Ms. Hoffman stated that concluded the workshop. We bumped the gauges workshop because the agenda was too full, but that will be brought back to the work session in March. There will be an update on gauges at this afternoon's meeting. Locations for additional gauges will be in part of the work session discussion in March.

Ms. Hoffman reminded everyone that the regular Flood Authority meeting will be at 1:30 P.M. today at the Courthouse.

The work session adjourned at 11:21 P.M.

**Chehalis River Basin Flood Authority
Lewis County Courthouse
351 NW North St.
Chehalis, WA**

**February 19, 2009 – 1:30 P.M.
Meeting Notes**

Members Present: Dolores Lee, Town of Pe Ell; Kathy Martin, Town of Bucoda; Ron Schillinger, City of Montesano; Bill Bates, City of Centralia; Chad Taylor, City of Chehalis; Mark White, Chehalis Tribe; Terry Willis, Grays Harbor County; Mark Swartout, Thurston County; Ron Averill, Lewis County; Dan Thompson, City of Oakville; James Cook, City of Aberdeen

Others Present: Please see sign in sheets

Handouts/Materials Used:

- Meeting Notes from Flood Authority Meeting, January 15, 2009
- Meeting Notes from Flood Authority Work Session, January 15, 2009
- Expenditure Review
- ESA Monthly Status Report No. 6
- EES Consulting Phase II Feasibility Study Budget Estimates
- PUD Draft Scope of Work
- PowerPoint
- Chehalis River Basin Flood Authority Project List Proposals
- PUD Handouts and Maps
- House Bills 5704 and 5705
- Petitions

1. Call to Order

Chairman Averill called the meeting to order at 1:37 P.M. and explained the membership and purpose of the Flood Authority to new guests in attendance.

2. Introductions

Board members introduced themselves.

3. Review and Approval of Agenda

The agenda was approved without objection.

4. Approval of Meeting Notes

The meeting notes from the work session and regular Flood Authority meeting of January 15, 2009 were approved without objection.

5. Public Comment

Ms. Julie Powe, Chehalis resident, attended the public meeting last week and suggested more advertising before the next public meeting. Ms. Powe stated she would like to see better attendance from the Authority board members.

Dr. John Henrickson, Chair of One Voice, stated the attendance at this meeting attested to the importance of the materials being presented at today's meeting and possibly to some skepticism regarding history preceding the Flood Authority. Residents of the Chehalis River Valley have seen commissions and groups come and go and millions of dollars spent and not a lot accomplished. Dr. Hendrickson stated he believes it will be different this time.

Dr. Henrickson stated an endorsement of a retention project by the Flood Authority is premature at this time. Dr. Hendrickson stated the information to be presented today is factual but it is not the basis for which a decision can be made as far as retention is concerned. That falls on the shoulders of this group.

Dr. Henrickson stated One Voice is asking the Authority to continue the investigation that was begun by the Lewis County PUD. Phase I was completed by PUD using PUD funds as there is a chance of some type of hydro generation involvement which would be a minor part of this project. The next phase would be the permitting which gathers the scientific data: drilling the holes in the ground; determining if the site selected will support dams; include ecological and fish habitat information and a more detailed cost benefit analysis, and will either validate or invalidate the concept of retention. The PUD cannot do this as it is now a flood control project.

Dr. Henrickson had two petitions he presented to the Authority. One was gathered at the public meeting on February 11 and one consists of businesses in Centralia and Chehalis. The petitions are recommending that the Flood Authority pick up the next phase of the investigation.

Dr. Henrickson read a letter from Representatives DeBolt and Alexander and Senator Swecker encouraging the Authority to fund the Phase II study which will provide the data necessary to determine if retention holds promise as a viable flood mitigation strategy.

There will be a meeting at Adna High School on March 2, 7:00 P.M. More detail on today's presentation will be given at that time.

Mr. Dave Fenn, Boistfort Valley resident, stated the Chronicle indicated that not everyone in the west end of the County was in favor of dams. A dam was proposed above Doty and the Doty residents were not in favor of that; another proposal was for the Boistfort Valley and that was not well received. However, these proposals have significant support of the people in that area who want protection from flooding for everyone on the length of the river to Aberdeen.

6. Reports

a) Chairman's report

Chairman Averill stated three work sessions have been held by the Flood Authority and it is predominantly looking at flood hazard mitigation plans and a project list for the Basin. The Chair understands that there may be conflicting meetings for the Flood Authority

Board and encouraged the Board to attend every possible meeting, or have someone else attend in the member's place.

Chairman Averill updated the members on Mr. Mike Sharar's medical condition. His prognosis looks good and it is hoped that Mr. Sharar can return to work by this summer. In Mr. Sharar's absence, Ms. Linda Hoffman will be the lead for ESA Adolfson.

Chairman Averill stated two public meetings were held last week to inform the public of what the Flood Authority is working on and to get public feedback on various approaches on flood mitigation. A summary of those meetings was included in the member packets.

b) Flood District Formation Update

When the Flood Authority was created there were several objectives. One is to conduct a study to determine what types of mitigation are necessary. Another goal is to assist in the formation of a Flood Control District. Currently that is being looked at and steps have been taken to change Washington State legislation to accommodate a Flood Control District of three or more counties. Legislation includes a one-man one-vote provision and another provision allows for more than three representatives (commissioners) for the District.

Senator Dan Swecker dropped a bill to create a Flood District with one commissioner for each County in the district, plus two at large commissioners who would be drawn from the counties with the largest population in the district, and no County having more than two representatives.

In later discussion, Senator Swecker included a proviso in the legislation that if the Flood District has an adjacent or abutting Tribe and that Tribe desires to participate in the District they can choose to form a compact with the District and then would have a vote as a member of the District.

Commissioner Averill testified on that bill and the Committee immediately decided to forward the bill out of Committee. It will be going to Senate Rules and if they pass it to the floor for a vote, the same procedure will occur in the House.

The second bill dropped by Senator Swecker involves how one votes in a Flood Control District. The current rules state the voting is by property owners and each property owner would get two votes with an additional two votes for each ten acres that they own, up to a total of 40 votes. For a larger population, in this case about 150,000 people, the problem of identifying property owners and how many votes they have is a very large undertaking. None of the County Assessors want to have to do this and the Supreme Court has ruled that votes should be one man one vote, with the exception for small districts. That bill was also submitted to committee and was given a do pass. The member packets include the explanations of Senate Bills 5704 and 5705.

Commissioner Willis asked which counties have the largest population.

Chairman Averill stated within the WRIA the largest counties are Grays Harbor County and Lewis County.

Commissioner Willis did not think the language was real clear on this and asked that it be made clearer.

Mr. Schillinger asked regarding Commissioner Willis' question, if that had the consent of all nine commissioners.

Chairman Averill stated it did with the exception of Commissioner MacLeod who was not in attendance at that meeting.

c) Member Reports

There were no member reports.

d) Correspondence

Chairman Averill received a letter from the Cowlitz Indian Tribe requesting membership in the Flood Authority. Chairman Averill stated he explained to the representative of the Tribe that a similar request was received from another Tribe and that it is the rule of the Flood Authority that unless a Tribe has rule-making jurisdiction for land issues along the river it would not be taken in for membership. The Chair also informed the representative that the Flood Authority passed a resolution that the membership be held to 11 members. Chairman Averill stated the Authority would most likely respectfully decline the Tribe's membership, he also made it known that the Tribe is welcome to attend the meetings and make public comment.

There was no objection to Chairman Averill responding to the Tribe with a letter similar to the letter that was sent to the Quinault Tribe.

e) State Contingent Report

Mr. John Donahue stated he had met with Laura Orr, Corps of Engineers, who reported that the evaluation phase of their project continues. The purpose of this phase is to confirm the design and the cost and benefits of that project with results expected later in 2009. The Corps has recently received an updated hydraulic model and it is under review by Ms. Orr's staff. The Corps is engaging in contracts for purposes of wetlands identification and other elements of the early design process. Some delays have been encountered due to staff issues, particularly having to do with the flooding last month. Staff is required for certain tasks associated with current flooding.

Mr. Donahue expects a project schedule from Ms. Orr next week. In the coming month he is expecting an updated project management plan that takes us through 2009. When he receives that plan he will reconvene a coordination team. The purpose of that team is to provide input and feedback to the Corps as they revisit their design and assumptions.

Mr. Donahue stated he has taken tours of the area with agency staff and Corps of Engineers staff reviewing productive conversations about specific design issues. That will contribute quite a bit to the productivity of their review.

Old Business

7. Public Values Survey Contract Update

Ms. Linda Hoffman stated in January the Authority authorized Lewis County to advertise for proposals from public opinion research firms to develop and conduct a random sample telephone survey of Basin residents. This is another way in addition to public meetings to engage citizens in the efforts of the Flood Authority. The purpose of the survey is to provide input regarding public values concerning flooding, public concerns, identified problems, possible solutions the public is interested in and what they think about paying for those solutions. The Authority authorized the Board Advisory Committee (BAC) to screen proposals from those public research firms, select a firm and manage the firm and survey process to produce a report by March 19, with a maximum budget amount of \$37,500. Results must be received by March 19 so the input from the survey can be used by the Authority as it moves forward in decision making.

Out of nine proposals received, the BAC selected Elway Research, Inc., of Seattle. Lewis County has entered into a contract on behalf of the Authority and based on the scope of work approved by the BAC. Stuart Elway of Elway Research has begun working with the BAC on the questions and sampling methodology. The survey will be conducted in the next month. The results will be analyzed and we are proposing Elway Research be on the March 19 agenda to give their final report.

Chairman Averill asked if there was a plan for some public education so if people are contacted by the surveyor they will not hang up.

Ms. Hoffman stated the BAC talked to the survey research firm about the pros and cons of doing advertisement to alert people in advance. Elway's recommendation is not to do a full advertising effort. The concern is that this will influence the answers to the survey rather than having an uninfluenced opinion. The BAC accepted that recommendation. We could do a public service announcement to let people know that a survey is taking place versus having them study up in advance as to what their answers would be.

We want to be sure we have the ability to compare responses from different parts of the Basin.

8. Stream Gauge Program Update

Ms. Ann Root stated the stream gauge discussion was canceled at the work session at this morning's meeting to allow more time for the project list, and more information would be coming regarding the stream gauges.

ESA has continued to do research on a couple of new programs: the USGS flood path mapping program and also on the alert system. We need input from different jurisdictions on new gauges, where people think new gauges should be installed, why

they think they should be there, and what information is needed from those gauges. An e-mail reminder will be sent out in the near future and all information will be brought to you at the next work session.

New Business

9. Expenditure Review

Mr. Bob Johnson briefly summarized the expenditure report through 2/19/09. To date we have spent \$170,768.80, the majority of that going to the consulting services. Mr. Johnson projected some figures to see if the money left would take us through June, particularly the staff time from Grays Harbor and Thurston County. We may come up short based on the original budget; however salary wages and benefits of the lead agency will be far from expended by that time and the State indicates there is not a problem switching the money around. The original \$1,907,000 allocated for studies has not been spent and there is still \$2,329,231 left in the budget.

Chairman Averill stated the \$2,500,000 passed in House Bills 3374 and 3375 did not stipulate that it all had to be spent by June 30, 2009. He expects in this session that there will be a continuing resolution so the money that remains in the account can be accessed.

10. Public Workshop Summary

Ms. Hoffman stated the Authority sponsored two public meetings, one in Chehalis and one in Montesano. The purpose was to introduce community members to the Flood Authority and its efforts, give some background, answer questions, record comments and to solicit input on flood-related problems, goals and solutions. The Chehalis meeting was attended by about 170 people and the Montesano meeting was attended by 45 people.

Ms. Hoffman explained the agenda and the format for the meetings. The report was distributed to the Board and it has been posted on Lewis County's website. The input from the public meetings will be used to build our inventory of problems, possible goals and suggested projects and solutions. It is not the only place we are gathering our problem inventory and project list but it is one among several places where we are gathering information. We anticipate having at least a couple more public meetings, specifically in June on the draft plan, and at some point between now and June, possibly in April, we will have another meeting providing information that people can react to at a point where decisions have not yet been made and there is an opportunity to weigh in and influence those decisions.

Commissioner Willis asked if the plan is to have the same type of meetings, one in the Upper Chehalis and one in the Lower Chehalis Basin.

Ms. Hoffman stated we are scheduled to have one meeting at each time, one in April or May and one in June. We have not yet determined locations.

Commissioner Willis suggested each meeting in both places. She stated on page 4 of the meeting notes from the Montesano meeting the word "cribs" should be "tribs".

Ms. Hoffman had maps of the Basin. The colored stars showed where people attending the meeting came from.

Ms. Hoffman stated she took note of the request for better advertising for future meetings.

11. Update on Developing the Mitigation Project List

Ms. Root summarized the work session held this morning. This was the first effort in developing a mitigation project list that will be included in the Comprehensive Flood Management Plan. We discussed mitigation alternatives in the broad sense, the different approaches, both structural and non structural. We discussed different lists of projects, using projects identified in existing flood management plans in the Basin, as well as a list of new projects proposed by jurisdictions within the Flood Authority, and a preliminary list of projects proposed at the public meetings. Those lists were distributed.

Ms. Root requested that people fill out the project form and she will continue to add projects to the list.

Mr. Dave Carlton explained the process used. The member packets included a flow chart that identified the issues and problems within the Basin and how these problems are to be addressed. The list of problems will correlate with the benefits. There is a two-fold process: Issues and Projects. We want to look at each issue and make sure there is a project that addresses it, and then analyze the project to see what is feasible, what is cost effective, and what exactly does the Flood Authority want to do.

At the bottom of the flow chart is the action plan, projects on the ground where dirt is moved, changes to local regulations, funding, etc. During this process the Flood Authority will need to develop some criteria: what problems do we want to address and how do we choose what to do about that problem. ESA will help analyze alternatives but will not select alternatives for the Authority.

12. Water Retention Studies Report

Mr. Dave Muller, Lewis County PUD, presented a PowerPoint on the proposed water retention project. Lewis County PUD Commissioners, after the 2007 flood, asked if there was something the PUD could do to assist in flood reduction for the Chehalis River Basin. The public asked for a basin-wide plan and water retention. The PUD Commissioners took a preliminary look and since there could be a hydro component, the PUD did a reconnaissance study and contracted with EES Consulting.

EES looked at sites on the upper Chehalis and on the south fork and the Newaukum. The Newaukum did not have any good sites that would offer drainage area protection. EES looked at flood reduction potential, improved habitat for fish with increased flows in the summer, and the hydro component.

The PUD coordinated with Northwest Hydraulics with their flood model. The graphs showed possible reductions and flow enhancement during the summer months.

The thought currently is to marry the water retention plan with some aspects of the Corps plan to improve the levees to handle some of the isolated tributaries.

Mr. Muller thanked the Authority for the opportunity to present the proposal and asked it to consider the funding for Phase II. It would offer a good opportunity to protect from flooding in the Basin. When combined with elements of the other activities, such as the Corps or other processes, it provides the most protection for the most people in the Basin.

Commissioner Willis stated this is a \$480,000 project and asked if it could be split into phases.

Mr. Muller stated he would require some discussion in that regard with both the Authority and with the consultant. A large piece of this is the engineering and another large piece is the fish and environmental aspect. They could be split, but the question is: would that delay the process and do you want to do one without the other.

Commissioner Willis stated her concern is that the project would be started and something would come up that would not allow any further progress. She would not want all the money dedicated to this project if it could not be completed.

Mr. Muller stated it would be appropriate to keep the Authority briefed every step of the way so if something like that did come up, the Authority would be aware of it and determine if it should not be continued.

Commissioner Willis stated the Authority has \$2.5 million to conduct studies, followed by the \$50 million project fund. All of the numbers in the PUD project are hundreds of millions of dollars. Where would the additional funds come from?

Mr. Muller stated it would need to come from Federal funding, similar to the Corps funding. It is not likely we could make a proposal to get it into the economic stimulus package since they are looking for shovel-ready projects. If there is a second wave and there is support for a plan like this, the PUD would work with its delegation to see how that might happen.

Commissioner Willis asked if the \$480,000 would be part of the deal to find funds for later.

Mr. Muller stated he did not include in this analysis any provisions to go after grant money. The PUD can devote some effort to that to help with the outreach.

Commissioner Willis asked if this does not coordinate with the alleviation of flooding of I-5, what kind of proximity is there of this being funded later on: does that have to be part of it in this political climate?

Mr. Muller stated with what we know today, based on the flooding of I-5 with the water retention facilities, there is still some minor flooding of I-5 because the south end of the airport levee is not sufficient. There would need to be some modifications there, but obviously not as high as would be needed without the retention facilities.

Commissioner Willis' concern is if we do not alleviate the I-5 flooding issue then funding for projects later on may not get here. They are going to look at that issue at the Federal level and it is important.

Mr. Muller stated the best solution discussed so far is a broad base solution: water retention, some of the Corps elements to protect I-5 and some isolated streams, and maybe some more downstream in Thurston and Grays Harbor. In other words, the bigger funding aspects included in one plan and fund it as one big project.

Commissioner Willis asked for a copy of the feasibility study. She asked about the NHC flood model at Grand Mound.

Mr. Muller stated that is Northwest Hydraulics' hydraulic model for the County and for FEMA and they fed PUD's information into the model to show that differential with or without the facilities.

Commissioner Willis pointed out there are a lot of tributaries lower in the river that would not benefit from the fish habitat efforts. When water is released it will take care of the main stem but it won't take care of the side rivers with fish habitat.

Mr. Muller stated that is correct and that element would be a considerable amount of the Phase II study.

Chairman Averill stated the Mellen Street portion of the river about mid-July becomes a major growing area for algae; temperatures go up and oxygen goes down, and that is not a good passage for fish during a major spawning season.

Mr. Bates, Centralia, asked if these retention facilities were built, who would own them and who would control them.

Mr. Muller stated that would fall under the funding that would come from the Flood Control project, whether it would be a Federal agency, or a State agency and he doubts the PUD would own it. The PUD could provide an arrangement with the funding agencies on the operation if that made sense with the hydro. That would help with some of the annual costs but would not provide all of the maintenance because the hydro is such a small piece, but it could help.

Chairman Averill stated it could also become the property of the Flood Control District.

Mr. Mark White, Chehalis Tribe, stated a project of this size would trigger an EIS. He asked if this has been weighed against other ideas in the Basin.

Mr. Muller stated the PUD has not evaluated dredging or other alternatives. He assumes some of that would be done by the Authority as it moves forward with its project list. This would require the SEPA and EIS processes and they would be identified in the Phase II study.

Mr. White stated he had several technical questions and asked if he could submit them in writing.

Mr. Muller stated they should be submitted in writing and he would go over them with Mr. White.

Mr. Mark Swartout, Thurston County, stated some of this project information is based on the 2007 flood. In the 2007 flood, the rain event was an unusual rain event as far as where the majority of the water went in the watershed. Could graphs show the benefit if that had been in place for the 2009 flood, which had a more regular rain pattern?

Mr. Muller stated analyzing the 2009 flood is part of the next discussion. The 100 year flood is what FEMA goes by, so there would be the 2007, the 100 year flood, and the most recent 2009 flood. With the model you can assume all the rain in the Skookumchuck or Black River and analyze it that way.

Mr. Swartout asked if that could be done, regarding those graphs, before the Phase II funding.

Mr. Muller stated that is a question for NHC, who is the second half of Mr. Muller's presentation.

Mr. Bates asked about the time frame regarding the Corps project which is 2014. Is there a time frame for the retention facilities project?

Mr. Muller stated a lot of it has to do with permitting, which is a 2-5 year time frame. It could be longer if issues develop. The most optimistic outlook is 2014.

Mr. Bates asked how amenable the Corps is to this retention project. The newspaper stated the Corps thinks this would be a step back.

Mr. Muller stated he is aware of that comment, but the details of this project have not been discussed with the Corps. That will be one of the next steps.

Chairman Averill stated the Flood Authority and the State are currently in Phase I of the Corps project. That project was stopped in 2003 at about 35% design completion. In the aftermath of the 2007 flood and bringing that project back into the WRDA bill, it needed to be brought up to full strength and we needed to test data from the 1996 flood, as well as the 2007 and 2009 data. Just as this project would require evaluations against that, the same process must be done with the Corps project.

Chairman Averill stated he is not as pessimistic about this as the Corps. HB 3374 and 3375 have specific stipulations on the \$50 million and the Corps would be required to be coordinated with the needs of the local communities on the River, and a project must be approved by both Houses and the Governor's office before anything goes forward. There is plenty of room for discussion about what the Corps project will look like and how it will fit into our overall needs in the Basin.

Mr. Bates stated it might be a good thing to get a promise of some money as compared to spending all of this money on the possibility of getting some federal grants.

Mr. Muller stated there is some money that the Corps was authorized but not appropriated for the Corps project. He is not sure if that money is available. He hopes the Authority would look at the overall Basin protection, not just the levees, and incorporate the two together in a grand scheme rather than doing just part of the Basin.

Mr. Schillinger thanked Mr. Muller for this proposed project. There is a potential to increase in-stream flows during the dry season and the Basin Partnership talked about retention in head water areas for a long time, and it is nice to get down to specifics.

Mr. Swartout asked if there is enough flexibility in the WRDA bill for the Corps project to add this project to it.

Chairman Averill stated according to the WRDA bill you are allowed to make up to a 20% change in the project. If it does not exceed that, you can make changes to the project. The WRDA bill received its approval from Congress in November of 2007 but it has not been appropriated. He does not know if the stimulus package got any of that money.

Commissioner Willis stated going back to the question of operation and maintenance, if a Flood Control District is not formed, does this fall apart and does it fall apart soon enough that we have not spent all the money that could be used for something else.

Mr. Larry Karpack, Northwest Hydraulics, stated the Flood Control District would be great but another option would be interlocal agreements: PUD with Lewis County; Lewis County with cities or other counties. It may not include everyone here, but it would be an option.

A question was asked, if you run the model, what if these things fail?

Mr. Karpack stated they do the right engineering to make sure that that does not happen. There is a local geologist in Lewis County that was familiar with those and in your Phase II analysis you would look at that and determine the risk and decide on the precautions to take.

Mr. Michael Golden, Lewis County Prosecuting Attorney, stated NHC has been on contract through his office since June 2008 to perform the modeling work that has resulted in the graphs and charts seen in the PowerPoint.

Mr. Golden explained that the PUD's work is separate from Mr. Golden's work. The PUD has asked the Prosecuting Attorney's office to provide data to them. To answer the question about the 2009 data being put into the model, it absolutely can be. Can a failure model be run to tell what would happen if the retention facilities should fail? This has to be done every five years as part of the requirement.

Some preliminary feasibility work has already been done regarding the PUD presentation as well as on the current design state of the Corps plan.

After the flood of 2007 through discussions with the Prosecuting Attorney's office and the Board of County Commissioners, we were all concerned that there had been years of study dating back to the 1930's but we had no effective solutions. Even though there had been millions of dollars spent, there was no work product at all. What we did have, and it took months to locate, was an incomplete model of the portion of the Basin based on old data on an older computer system that was no longer the model being used. After the 1996 flooding and the models had been worked up, they had never been updated. The data was old, the software was old and a lot of the presumptions that went into it were not preserved.

We attempted to contact Federal and State agencies and talked to the Tribe and told them what we were looking at. Our concern was we did not have a Basin-wide solution and the modeling was only from Grand Mound upstream. The data needed updating and the new 2007 flood data needed to be added, as well as a series of validity testing would have to be made against existing surface water elevations.

Part of the Prosecuting Attorney's functions is to work with Risk Management and those two offices went through a Request for Qualifications (RFQ) process to do this type of work. Five companies responded and NHC had the most experience and abilities to do this work. They are under contract with FEMA to do the 100 year flood plain studies for Lewis County. They had an existing model and we needed that model updated with the new data and needed a different output than what FEMA needed.

Late last winter we started working with NHC and entered into a contract with them in June of 2008. Public Works gathered the flood levels for the 2007 flood. A lot of the smaller tributaries are not modeled. The mathematical model goes to Porter and we would like to extend that to see outside of Lewis County's borders. Ideally, the entire model will extend all the way to the ocean.

The primary capability is to increase our understanding of the river behavior. The types of events are not limited to the event of 1996 or the 2007 event or the hypothetical 100-year event. With the model, you can insert whatever flow you are looking for; for example if the rain was concentrated in only one area. It is called an unsteady model and

that means it has the element of time in it. The rivers do not all flood or crest at the same time, and this model accounts for that.

Mr. Golden stated he would like to extend the model down stream and he would like the 2009 data added. This would be of substantial benefit to Lewis County and to all people from Lewis County to the ocean that are affected by the flood events.

Mr. Golden presented a PowerPoint to show what the model can do. The Skookumchuck has not been modeled in because it does not typically flood; the China Creek has not been modeled, so flooding in Centralia caused by China Creek is not modeled. Salzer is modeled to a degree. The main focus in this model is the main stream and the primary tributaries.

The PowerPoint showed the depth of the water during the 2007 event, the areas that would stay dry with the PUD retention facilities in place, and the reduction of water in the river and tributaries with the retention facilities in place. Slides also showed the 2007 event with the Corps projects as it currently stands. We received plans of where the levees would go and how tall they would be and that information was inserted into the model. Areas outside the levees would increase slightly because there are areas that did have water but no longer do. That amount is included and considered in the model and is calculated. Areas that would be made dry because of a levee are shown. There are areas that are somewhat problematic because the Corps model is incomplete.

The 100 year event is roughly similar to the 1996 event. FEMA has determined what the 100 year flood is and it may or may not occur. It consists of flows along certain tributaries and the main stem. This was shown with and without the PUD proposal and with levee projects in place.

The primary advantage of the model and the reason Mr. Golden is present at this meeting is because currently what is proposed and currently what we have to work with are two different plans. They have both been inserted into the model. Mr. Golden suggests that this model be used by this body as part of the criteria for the approval of any flood mitigation plan because it can show you what the impact is, cumulative or alone, of whatever is being provided to you. Millions of dollars have been spent and since the County started this work it has spent between \$50,000 and \$70,000. Mr. Golden is asking the Flood Authority for reimbursement to the County the money spent and a budget will be provided of what the County would like to do and request funding through the County as lead agency to continue this work to the benefit of the Flood Authority and communities.

Commissioner Willis asked if once this project is over with and the money has been spent, where will it be housed and who will maintain it.

Mr. Golden stated FEMA has done most of this work. We have paid a portion of it. Either the County does this as lead agency for the Authority, in which case the information can be provided in disk format. The data is much less of an issue. What you

need is the brains to operate it. The analysis is the big issue and it must be kept up to date. Whichever agency is doing flood control planning on the river should have an ongoing relationship with the entity that is in control of the model.

Mr. White asked what the velocity shows between the dam project and the levee project.

Mr. Larry Karpack, NHC, stated he did not know; that wasn't actually looked at. NHC could generate information on velocities.

Mr. White asked if the PUD is relying on this data for what NHC does.

Mr. Karpack stated the PUD told us where the potential storage reservoirs were and the size of those reservoirs. They are upstream (Pe Ell, Boistfort) of the upstream extent of our model. The extent of our model is around Doty and Boistfort. We adjusted the inflows at the upstream end of our model to reflect the fact that a substantial portion of those tributary basins would be captured in these upstream storage reservoirs.

Mr. White asked if all of NHC's benefit costs came from the PUD model.

Mr. Karpack stated the benefit costs are entirely EES work. NHC work consisted of the mapping, the water surface elevation differences, the areas that would or would not be inundated under the two scenarios. That information was provided to them in the forms of elevation data and graphical data. It is all our modeling and hydraulic analysis that went into their cost benefit on the flood end.

Mr. Golden stated NHC's work is strictly on the hydraulic modeling and the cost benefit is either done in house or by another consultant. They asked us the impact if there is a reduction of water at these locations. We are trying to come up with a model that will tell us where the water will go under certain flood conditions.

Mr. White stated there are holes in the data and he is trying to determine the integrity of the PUD's project. If it is based upon your model then those holes are in their project, also.

Mr. Golden stated there is a 65% hole in the Corps project because it is 65% un-designed. He does not know the impact of the Corps project because it is incomplete. If you take the project being proposed by the PUD, that project, once they tell us how much water they are holding back, is done. How they can build it or whether they can build it is not his office's issue. If Mr. White is asking the impact of taking this water out of the system, he can tell that without holes in the data. If Mr. White is asking to put the Corps plan together with anything else, the fact that the Corps plan is only 35% complete means that the Corps plan has a 65% hole in it. If the Corps plan was complete, it could be modeled and could tell you what it would do. The Corps has our data and is working with it. We are hoping to find out what they propose because it is Mr. Golden's job to advise the BOCC on options. If the Corps says they can do something and the best

scientific data is that they can do it, then that is what he will tell the BOCC. If the best scientific data is that they cannot do it, he will tell them that.

Mr. Karpack stated the PUD did not do any benefit cost analysis on the Corps plan. It looked at the two water retention facilities. For the benefit cost analysis we assumed that the impacts, the damages on the benefit cost side, the flood levels, were reduced but not eliminated. We did not say we stopped all flooding.

Chairman Averill stated the PUD project proposes two flood retention facilities on two parts of the Chehalis main stem and on the south fork. The Corps plan includes an element of a retention facility on the Skookumchuck dam. One proposal was 11,000 acre feet increase and the other 20,000 and when the Corps stopped the study they had chosen the 11,000. Further down the river there is a generating facility that provides some flood control protection on the Wynoochee.

Mr. Golden states the Corps indicates a reduction in the flow on the Skookumchuck as a result of putting modifications to the Skookumchuck dam. In so doing, they indicate they will restrict the flow at Mellen St. to a certain amount. The calculated inflows downstream of the dam are actually in excess of what the Corps says it will be able to do by modifying the dam. There is some problem with the data internally within the Corps plan. Additional work needs to be done on the data that is within the 35% design stage. They are working on it. We need the engineers sitting down with the engineers talking about what can be done on any of these. The fact that the Corps has asked for a copy of the model shows the Corps' interest in the best available scientific information.

Mr. White asked if existing data was used in the cross sections or if NHC used new cross sections.

Mr. Karpack stated the genesis of this model was the Corps PIE model from the flood reduction study. The cross sections are still those cross sections. The primary effort NHC has been conducting for FEMA was converting that from the old format to the new format which allows the graphical linking of the model with topography. We have also been correcting things like levee heights and levee lengths.

Mr. White asked if Mr. Golden's request would be to update a lot of this information or use the existing data and just move down river.

Mr. Golden stated there is data from the County line downriver to Porter. The assumptions that were made and the documentation that will tell you why certain assumptions made in the data do not appear to exist. The request for the downstream work is likely to get new survey data and not take the existing data from Grand Mound downstream. One question is do we have LIDAR data, how good is the data from the County line downstream. The Authority and the Grays Harbor Community College has a great deal of information and the other studies done by the Corps are all sources of information so we do not have to recreate the wheel. If we can get the data and input it

into the model and extend it downstream we could end up with the same maps as you see here.

Chairman Averill asked Mr. Swartout if Thurston County has LIDAR data.

Mr. Swartout stated Thurston County does have LIDAR data and would like to talk to NHC about that.

[Unidentified speaker] This modeling was done on the 2007 flood event and the graphs show what happened in 2007. Can you do the same thing with the 2009 event and can you do it with the current budget that you are working under with Lewis County or would that be part of Phase II.

Mr. Golden stated the BOCC recently authorized additional funds. There were two contracts and we swapped the funding on the contracts so we can continue the work. The contract amount we are limited to is \$80,000 and we are within \$10-\$20,000. As it stands now, the 2009 event probably could not be done everywhere. We were looking to take the 2009 data on the Skookumchuck and getting for the first time the ability to validate Skookumchuck data. Without high waters previously on the Skookumchuck it is very difficult to validate and calibrate the model. Part of the request we make is to take the 2009 flood data and input that so we have the 100 year and the 2007 but the 2009 data also and the model calibrated to each of those which increases the confidence of what we would tell you would happen.

Mr. Golden stated the work we are trying to do is an ongoing thing and he is going to suggest that whoever funds this project keep it going. There was a lot of catch-up to do. After the 1996 flood with all the money poured into it, none of the new data was entered into it. In the long run, it is a greater value to everyone if a model like this is maintained current.

Commissioner Willis asked how old the FEMA data is that was referred to earlier.

Mr. Karpack stated he did not know specifically; he can get that information. Because so much of the flooding is over bank in what in the model is called a storage area, the topography data is very important as well as off channel. The channel cross-section data is the most important data.

Mr. Golden stated every time there is a major flood event the cross-sections will change, so it needs to be updated.

Mr. Chad Taylor, Chehalis, stated it is important that we move forward with this project. Phase II is important and water retention is important to look at. He made a motion to authorize Lewis County as the lead agency to negotiate an interlocal agreement with the PUD to continue Phase II of the water retention study.

Ms. Lee seconded.

Chairman Averill stated there are actually two proposals and this addresses only the PUD proposal. The other has not been presented with any specifics.

Ms. Martin stated a lot of information has been received today and believed more time was needed to digest it. Ms. Martin voted to table the motion. Mr. Thompson seconded.

Without objection the motion was tabled to the meeting of March 19, 2009.

Mr. White asked that his questions were answered before the next meeting so he would be ready to vote.

Commissioner Willis stated she is interested in seeing Mr. White's questions and the answers also.

Mr. Taylor stated the Board needs to be prepared to vote on this at the next meeting. He wants things to move forward and give flood protection to the people who live here.

Chairman Averill stated the Board can go through Phase I and will have time to review Mr. White's questions and the answers. Chairman Averill reminded the Board of the meeting on March 2 in Adna and hoped some of the Board could attend.

Mr. Swartout asked if the Board could get a copy of the letter Dr. Henrickson read from the Legislators.

Commissioner Willis asked for copies of the petitions.

13. Confirm Next Meeting

The next meeting will be on March 19, 2009 at 1:30 P.M. Mr. Carlton asked for a placeholder on the agenda for a presentation by USGS and a proposal that the Chehalis Basin Partnership has been working on regarding groundwater/surface water interaction.

14. Adjourn

The meeting adjourned at 3:59 P.M.