

**Flood Authority Work Session
Lewis County Historic Courthouse
Chehalis, WA 98532**

**December 17, 2009 – 9:00 A.M.
Meeting Notes**

1. Convene Work Session

Chairman Averill called the meeting to order at 9:11am.

2. Introductions

Board members and audience introduced themselves.

3. Ecosystem Services

Commissioner Averill introduced Dave Batker of Earth Economics, who is leading the Ecosystem Services Analysis.

Mr. Batker just got back from the Climate Convention in Copenhagen. He was invited to talk about ecosystem services and he talked about the Flood Authority. He got a very good response. The head of the UN Environment Program was on the panel. The Convention was looking at climate change, which has a large impact on ecosystem services. He met with a large number of delegates, including members from the U.S. delegation. He left early to come to this meeting because he feels that things are really getting done in this basin. The model he will show the Authority today is also being used in Madagascar.

Mr. Batker said the due date for the draft report is coming up next week and Earth Economics will meet the deadline.

Mr. Batker explained that Earth Economics is developing a map of beneficiaries of flood protection. The beneficiaries are broad because of I-5.

Mr. Batker said that previously we looked at the economy as larger than the environment, but the economy is dependent on the environment. Our ecosystems provide services that feed directly into our quality of life. The ecosystem provides provisioning, regulation (such as flood control), and cultural services. Regulating functions include climate, gas, disturbance, water regulation, flood protection, etc. Production functions include food, raw materials, etc. Information functions include aesthetic, recreation, cultural & artistic, spiritual and historic, science, and education.

Mr. Batker showed a land use cover map of the basin. Mr. Batker explained that there are four categories of maps used in the analysis. The first category of maps show how services are provisioned. Flood protection is provided by forests and permeable soils, as well as built structures such as levees. Gray infrastructure and green infrastructure both provide flood protection. The second set of maps show who benefits from flood protection. People at higher elevations don't need flood protection. The third set of maps show the causes of flood damage. These include rainfall, slopes, and impermeable land cover. Modeling provisioning, beneficiaries, and causes is a new approach. Each ecosystem service has a similar set of maps. If you mapped carbon sequestration, the provisioning map would mostly be in

forests. The beneficiary map for carbon sequestration is global. Provisioning and beneficiary maps are different for each ecosystem service. For salmon, the beneficiaries aren't just in the basin, since the salmon often swim up to Canada or Alaska and are caught there.

Mr. Batker showed a draft model of the beneficiaries of flood protection. The beneficiaries include residential owners, private owners, and public owners (for example, public buildings). Mr. Batker showed a map of farms in the basin that are at risk of flood damages. He plans to go out in the community to make sure these maps are correct. Mr. Batker showed a map of Grays Harbor residents who are at risk of flooding. The map is still a draft and he isn't sure that it's entirely accurate. For example, the people on the coast may not be at risk from upstream flooding. There are similar maps for areas throughout the basin.

Mr. Batker showed another draft model for the causes of flood damage. Causes include snow melt and rainfall. Right now Earth Economics is using monthly rainfall, looking at past storms and where rain fell. However, peak rainfall causes flood damage. This model inputs into a map of flood causes, which looks at data from the Chehalis basin. Some data is much finer grained than others. There are about 10 maps of different causes, including slope and monthly rainfall. Mr. Batker would like to replace the monthly rainfall map with a map of just heavy rainfall. The 10 maps have been combined into a model.

Mr. Batker showed the most complicated draft model, which shows the provisioning of flood protection. That has to do with green infrastructure (type of rain event, ground cover, frozen soil, high or low tide, etc). The model also looks at gray infrastructures (dam storage, levees, bridges, other kinds of infrastructure). Higher levees constricting the floodway will give water more power and increase chance of levee breach. Levees set back with a larger floodway will have a longer life span. Bridges constrict the floodway and contribute to flood damage. There are a lot of elements in this model. The model maps impermeable surfaces, slope, vegetation types, etc. Earth Economics is starting to put together the first run of flood protection model values. Conveyance in the Chehalis River is very crucial. Within the basin, we can start seeing what areas are most important for providing flood protection. There's also an uncertainty map, and there are some areas with high uncertainty given the information Earth Economics currently has.

Mr. Batker said that Earth Economics is hoping to become involved in the Corps of Engineer's basin-wide general investigation. If they put the ecosystem services model together with the Corps' models, it will show what kind of green and gray infrastructure will provide the best flood protection in the basin. We want to put flood protection structures in the right places to provide robust investments over time.

Mr. Batker showed the map of land cover in the basin to discuss broader ecosystem services beyond flood protection. The reason it's important to value ecosystem services is that it allows you to define what is an asset, and you can justify restoration. We've never valued the benefits of a watershed, so we haven't treated them like they're assets. Earth Economics identified a list of ecosystem services in the Chehalis basin and then placed a value on the benefits they provide.

Mr. Batker displayed a table showing which ecosystem services are provided by the different ecosystem types in the basin. The ecosystem services include erosion control, water flow regulation, nutrient cycling, water supply, water quality, biological control, soil formation, food provisioning, biodiversity, gas and climate regulation, and habitat refugium. Earth Economics did a dollar valuation for each of these ecosystem services. For a lot of areas where you can find benefits, there isn't a dollar valuation,

and there are a few areas with big gaps. There currently is no valuation for snowpack or agriculture because there aren't studies for these areas. Pollination is an important ecosystem service, but no one has developed values for it. The values are based on peer-reviewed studies, some of which were done locally and others farther away. Earth Economics takes the highest and lowest values and boundary them. In the past, economists have looked at natural systems as zero-value because we don't have to pay for them. Natural systems provide flood protection for free, but if we don't value them, we lose them and end up with flood damage. Even though we don't pay for these benefits, they're of clear dollar value.

Mr. Batker showed a table that displays the value of ecosystem services by ecosystem types. Mark Swartout asked what the values cover. Mr. Batker said the numbers are value per acre. Water supply provided by wetlands, for example, provides a high value (\$199.11 per acre).

Commissioner Terry Willis asked Mr. Batker why there's a dollar value instead of points from 1 to 10. If one were to argue that riparian values is worth \$100 per acre, that's not a lot of money compared to other land uses you can choose for that area. In this case there can be a lot of arguments where the environment will lose from a dollar value. Mr. Batker said that he used to believe that there shouldn't be dollar values on ecosystem services, but he changed his mind. When we make decisions, the denomination is dollars. When we think about a funding mechanism, we need to think in terms of dollars. Riparian Forest has water supply values of \$2,105 per acre, but there are other services. If you only look at one ecosystem service, it doesn't add up to much, but if you look at all of them, it does add up to quite a bit. You may want to replace the ecosystem services in a particular piece of land with another activity that has a higher value, but there could be another location that works as well for the new activity with a lower value of ecosystem services. Rural counties are generally provisioners of ecosystem services. This means that they provide benefits. However, the only income counties can get from forests is logging. Right now we have a funding structure that treats most benefits that rural counties provide as zero. We only count a few things, such as timber harvest. We need to look again at the landscape and see how it provides benefits.

An audience member asked what the basis is for providing a dollar value. Mr. Batker said that it's like a house valuation. Earth Economics looks at peer reviewed studies on each ecosystem service. There is at least one study that corresponds to each value. Each study is referenced in Earth Economics' work. They take multiple studies and look at the lowest and highest values to provide a range. For example, to determine the value of water supply and provisioning of natural filtration of water, Earth Economics looks at the cost of a filtration plant that would be necessary to provide that service. There are 7 different methodologies for valuation.

Commissioner Averill asked if agricultural land only provides food provisioning, since it also has products. Mr. Batker said that's an important question. Another team at University of Vermont is looking at agricultural inputs and the other products from that which feed into the economy. They have an input-output model that looks at these basic services and how they create greater value and employment down the chain. Commissioner Averill said the Department of Agriculture produces a 5-year study of all the counties in the state that supplies an agricultural value. The problem is that it doesn't tell you where in the county the value is provided. There is a requirement to not identify who's producing what. Mr. Batker said one flaw in the valuation of agriculture is horses. Horse pasture is valued as grazing land or hay production, and no one has looked at the value of the horses themselves, which is high. It's a new methodology, and we know we're undervaluing what's out there. However, it's

better than what we used to do, which was to not value ecosystem services at all. Mr. Batker said that Jennifer McFadden from Earth Economics will be meeting with people in the basin to look over the information and ensure that it's accurate.

Mr. Batker displayed a table of the values derived so far for each land cover type in the Chehalis basin. The table shows the number of acres, the lowest value found, and the highest value found. Often the low values are very low, particularly when they are from old studies. The table multiplies the acres by the values to show the total value for each land cover type across all ecosystem services. These preliminary numbers show that the value people in the watershed receive from the ecosystem is about \$1.2-\$11.4 billion per year. These values are very large. Mr. Batker said that it is like the value of your house and everything you have in it. If your house was considered to have zero value, you might not do many repairs. You might think of your possessions as the only things of great value because they're traded in markets. However, for 99.9% of homeowners, their house itself is worth more than everything in it. The ecosystem is similar. The watershed is of vast value, equal or more to the economic activities that take place in it. When systems degrade and fall apart, we realize that we need to pay to repair them. If we have greater flooding caused by climate change or actions we've taken, now we have to spend money on it. The watershed is our biggest asset.

Mr. Batker asked if the audience had any questions.

Commissioner Averill said that at the end the Authority wants to know what its options are and which are the most or least viable economically from the standpoint of flood protection. Mr. Batker said that he hopes Earth Economics will be able to work closely with the Corps of Engineers, the PUD, USGS, and others to take the data and models they have developed and run scenarios for different types of flood protection. Earth Economics wants to look inside and outside the box for flood protection.

Kahle Jennings asked if owners of forest land should be paid not to harvest the land because it provides flood protection and other ecosystem services. Mr. Batker said it depends on a lot of things, but that may be the case. In Costa Rica they did that. They had flooding and couldn't provide drinking water. In 1996 they taxed drinking water and used the money to pay cattle ranchers to return their land to forest. Costa Rica is now 42% forested because that became a better way to make money than cattle ranching. Now they have a lot less flooding and a lot more drinking water. Mr. Batker's personal opinion is that we're going to find out that we need both green and gray capacity. Mr. Jennings asked if the Costa Rica example is a direct application of this model. Mr. Batker said that they did it without this model, but that it is a good example of what this model could show.

Commissioner Willis asked if the model would give dollar values for how much it would actually cost to implement a system like that. Mr. Batker said that it doesn't yet, but he's hoping it will. That's the last stage of the National Science Foundation grant. A good example in forestry is that Douglas Fir trees put on pulp between 50 and 150 years, but timber agencies don't have incentives to allow such long rotations. If they get funding for providing ecosystem services such as flood protection it could tip the values toward providing longer rotations. Analysis like that is where Earth Economics is aiming.

Commissioner Averill asked how Earth Economics includes a value for voids in the data. Mr. Batker said that the voids are counted as zero, so it's an underestimate. Every year there are more studies coming out on the value of ecosystem services, so they're getting more information all the time.

Commissioner Valenzuela asked if the final report will have such a wide range for the value of ecosystem services in the basin. Mr. Batker said that it would, and that the range is a common complaint about the analysis. Many people pick the median value, but Earth Economics doesn't do that because it leads to more uncertainty. Mr. Batker feels that decision makers should have a feel for the large range of possible values. In King County, they use the low value from ranges because they know that it can't be less than that. Commissioner Valenzuela said that sometimes flood mitigation measures, while they do well in keeping back the water, also cause other environmental effects. She asked if this sort of information is useful in figuring out not just the value of structural engineered mitigation measures, but also lost value in ecosystem services that would be destroyed by engineered solutions. Mr. Batker said that Earth Economics wants to develop this data so it can provide that type of analysis. In New Orleans, the Corps came around to agree with them that if you only emphasize levees for hurricane protection, the task is impossible. There are huge areas of wetlands that are being lost. A built structure can't prevent hurricane damage on that scale without the wetlands being restored. If you provide only built structures and ignore losses to green infrastructure, you run the risk of being worse off than you started in the beginning. For example, in the Midwest, we built a lot of levees. At the same time, farmers were tiling their lands to drain water faster and we lost the storage capacity of agricultural lands. The levees weren't broken but the water couldn't get through the system fast enough and backed up into Cedar Rapids. The two types of infrastructure conflicted. Circumstances like that are what we need to avoid moving forward.

Mr. White asked how Earth Economics accounts for upstream fill in the floodplain, which has positive economic benefits upstream but negative flood impacts downstream. Mr. Batker said that's why it's necessary to map out beneficiaries. Filling provides benefits in one area and damages in another. The same thing could be true for salmon. We need to develop information on these issues. Earth Economics feels this analysis helps with land use planning because in the future we can think about better places to locate facilities so they have the least impact on ecosystem services.

Commissioner Willis asked if the study accounts not just for land use, but also the value of the land itself. For example, agricultural land and wetlands that, should they be used in another manner, we would actually lose the land itself. Some of these things are irreplaceable. Does the model give that land a value, as opposed to just what's going on above ground. Mr. Batker said the model doesn't do that yet, except in Louisiana where it really was a choice between having land or having it converted to open water. The last part of the National Science Foundation Study is to look more closely at the economics. Earth Economics is trying to look at thresholds and irreplaceable losses. We want to avoid going across thresholds with catastrophic costs or irreplaceable losses. For example, we need to restore salmon so we aren't on the verge of extinction. As you approach a threshold, costs go up significantly, so there are incentives to stay away from thresholds.

Glenn Carter asked if there's a way to minimize backlash if urban populations are asked to transfer funds to rural areas. Mr. Batker said that in the past, such transfers have only happened when ecosystem services are entirely gone. China is paying farmers upstream of Beijing for flood protection benefits. In Washington, Earth Economics is working with Ecology and others to look at how urban centers benefit from ecosystem services. We need a statewide system that's fair for distribution of benefits from ecosystem services.

Mr. Jennings said that places like Seattle, Everett, Centralia, and Chehalis have benefitted from being able to convert land to a higher use, and now we're asking rural parts of the State to forgo ability to

develop land because we're reaching a tipping point. Mr. Batker said that for rural areas in Washington state, we don't want to limit development but instead think better about how and where we do development. A lot of the needed decisions about land use won't be costly, they just need to be more thoughtful.

Commissioner Averill thanked Mr. Batker for his presentation.

4. Break

The meeting recessed at 10:16, reconvening at 11:24.

5. Flood District Formation

Bruce Mackey said that at the last Authority work session, there was a discussion about how to move to a flood district. ESA Adolfson put together some information comparing the difference between a Flood Control district and a Flood Control Zone District. After that work, the Authority submitted a supplemental budget to the Governor's Office. Additional funding for the Authority is now in the Governor's budget and if it passes there will be additional funds for projects. Mr. Mackey said he's not an expert on flood districts, and in the discussion last month the Authority took him to the bounds of his knowledge and asked for an expert to come discuss the issues. John Ghilarducci of FCS Group has come to fill that role.

Mr. Ghilarducci said that he will be focusing on Flood Control Zone Districts because that's where his experience has been. FCS Group is a 30-person financial and management consulting firm out of Redmond. It started as a utility rate firm but their area of expertise has expanded. Mr. Ghilarducci leads the stormwater and flood control practice.

Mr. Ghilarducci said that there are many different funding options for Counties, including Stormwater Utility, Real Estate Excise Tax, Shellfish Protection Districts, etc. There are also special districts distinct from Flood Control Districts. FCS has helped set up many districts in a number of different jurisdictions.

Mr. Ghilarducci said that ESA Adolfson presented a set of criteria for funding options to the Authority last month. FCS has slightly different criteria, including:

- Revenue Sufficiency
 - Capital
 - Operations
- Reliability / Consistency
- Political Acceptability
- Equity
- Ease of Implementation
- Geographic Application
- Applicability of Funding Source to Function
- Ratings of Current Users

Mr. Ghilarducci explained that a Flood Control Zone District has broad authorization to construct and operate capital projects and provide flood control and stormwater management. Zone Districts can be set up countywide and/or in subzones. A county could pick an area in a floodplain and create a subzone and charge a different rate or tax in the subzone for the benefits they receive. A Zone District can be

formed by a vote of the county commissioners. The commissioners serve as the Board of Supervisors and the district is administered by County staff. The legislation also allows for use of advisory committees.

Mr. Ghilarducci said that zone districts have broader funding authority than flood control districts. This is a very important distinction. Zone districts have the authorization to levy a property tax up to 50 cents per 1000. The district can exceed that with a voter-authorized excess levy. You can form Local Improvement Districts if you can show increase in assessed value. Additionally, a zone district is authorized to craft and form stormwater rates, usually based on impermeable surfaces. The zone district has broad powers to contract privately, plan, and issue debt. Rates and taxes can be imposed within City boundaries, which a Stormwater Utility can't do. Commissioner Averill asked if the county can force the city into accepting taxes and rates. Mr. Ghilarducci said it's his understanding that a zone district rate can be imposed on cities. Commissioner Averill asked how Seattle and other cities in King County work with the zone district there. Mr. Ghilarducci said that the tax applies throughout the county, and a coordinating body decides where in the county the funds will be spend. Commissioner Valenzuela asked if that is decided in the initial vote of the BOCC. In other words, when the Lewis County BOCC sets up a zone district, do they say that it includes everyone in the County, including Centralia and Chehalis. Mr. Ghilarducci said yes, and that the boundary could be based on basin boundaries. Commissioner Willis asked about impacts. The fact the I-5 got shut down means there are impacts to the whole state. Could the tax be imposed countywide to take into account the impact to I-5. Mr. Ghilarducci said yes, but there's a question of political acceptability. How well can you make the case. Perhaps if citizens in the basin pay more than those outside. Bob Johnson said that Lewis County has three basins that flood. Could you divide taxes and provide benefits by those basins? Mr. Ghilarducci said yes, that would essentially be setting up three different subzones.

Commissioner Averill said that state law requires DOT to participate in the cost of protections provided by Flood Districts as they protect State highways. Bob Johnson asked if State owned lands are subject to taxes. Mr. Ghilarducci said they're subject to rates, but not taxes because they aren't taxable lands. Commissioner Averill said that if there's a special assessment, they'd have to pay.

Mr. Ghilarducci said a Zone District usually charges either rates or taxes, but there is no reason it couldn't use both. Whatcom County has a countywide Zone District that is taxed, but there are rate-based subzones. Mr. Swartout said that in Thurston County there is already a countywide stormwater utility. Is there an advantage to having a Zone District in addition to that? Mr. Ghilarducci said that a Zone District references the stormwater utility law and has all the same authorities. What a Zone District has that a stormwater utility doesn't is taxing ability. A potential way to set up a basin-wide entity would be to link the counties through an interlocal agreement to form a new multijurisdiction entity. Thurston County could potentially contribute through the stormwater utility, or instead set up a Zone District subzone. That would be a policy issue.

Julie Powe asked if there can be different rates based on who gets what benefits. When the Zone District first forms and is planning projects, can you tax everyone at the same rate until you know what projects will be done and who will receive benefits? Mr. Ghilarducci said yes, as long as you can justify your rates. You need to have a plan with rationale.

Mr. Ghilarducci applied his funding options criteria to a zone district for the Chehalis basin:

- Revenue Sufficiency: Mr. Ghilarducci said that a zone district would definitely provide the revenue needed for flood protection. You won't know what the revenue will be until you run the numbers. The annual revenue stream can also be leveraged for bonds. Commissioner Averill said there are other streams of revenue. Mr. Ghilarducci said the zone district won't preclude any other revenue and might help leverage state or federal funding.
- Reliability / Consistency: Mr. Ghilarducci said that a zone district would provide reliable and consistent funding.
- Political Acceptability: Mr. Ghilarducci said that political acceptability is a tough sell for any funding mechanism, and zone districts are not an exception.
- Equity: Mr. Ghilarducci said a zone district can be set up to be fair.
- Ease of Implementation: Mr. Ghilarducci said a zone district is relatively easy to implement because it can be set up by the commissioners.
- Geographic Application: Mr. Ghilarducci said there are questions that are yet to be answered to determine whether a zone district has good geographic application in this instance.
- Applicability of Funding Source to Function: Mr. Ghilarducci said a zone district would be very applicable for this function.
- Ratings of Current Users: Mr. Ghilarducci said other similar zone districts are too new to know user ratings yet.

Mr. Swartout asked if charges for people in the zone district are based on their benefit received or their contribution to the problem. Mr. Ghilarducci said that taxing on assessed value is based on benefit. Rates have historically been based on contribution to the problem. That's why they're better applied to stormwater management than flood protection. Whatcom County started their zone district with a rate structure based on assessed value. They came under a lot of heat because it was too much like a tax. They ended up converting it to a tax.

Commissioner Willis asked if the taxing authority includes distinctions between structures and nonstructures. A field with nothing on it to get flooded is probably a benefit, compared to a structure. Mr. Ghilarducci said the tax would exactly mirror existing property values. Mr. Johnson asked if setting rates based on beneficiaries of protection and not contribution to problem means that the people who cause the problem end up not paying. Mr. Ghilarducci said that it depends on how you set up rates. The only rates he knows of relating to flood or stormwater management are based on impervious surface area. They are intended to be a measure of contribution to runoff. Using that logic, Skagit County charges folks whether they're on top of the hill or in the valley, so people on top of the hill pay even though they don't benefit. Rates traditionally are based on contribution. Whether you can structure a rate to be based on benefit rather than contribution is a good question that could be groundbreaking with this study. Mr. Swartout asked if it needs to be based on contribution or if it could be based on both. Mr. Ghilarducci said it could potentially be based on both, but it would be a new thing.

Dan Thompson asked if impervious surfaces mean asphalt lots and buildings per square foot. Mr. Ghilarducci said yes, but it doesn't include natural features like soil type or slope. It's based on parking lots, building footprints, roads, etc. It's just man-made impervious structures.

Commissioner Averill asked if a zone district has the same taxing authorities as a control district. There are all kinds of options. There are 50 pages of RCW on districts. Part of that is setting fee structures. Flood district law allows you to charge different taxes based upon a formula for determining degree of

benefit. On the other hand, an initial fee could be the same for everyone while you develop the governance structure, and later you could change the fee. It appears that the structure for provisioning funds for a zone district is the same as for a control district. Mr. Ghilarducci said that one feature that is different is that the zone has the ability to have a property tax. Commissioner Averill said that you can do a property tax under a control district. Mr. Ghilarducci said he hasn't seen that provision but he knows that you can with a zone district.

Mr. Ghilarducci showed a potential model for a basin-wide zone district. Each county would set up a zone district. Mr. Ghilarducci isn't sure what mechanism would be used by the Tribe. Then, the counties and Tribe would develop an interlocal agreement for a governing body. The agreement would define governance, cost share, and coordination. Each County would form either a countywide or subzone district. The law allows different agencies to cooperate, collaborate, and create an agency that has the powers of the individual participants. An example in King County is the Cascade Water Alliance. The new entity formed by the interlocal agreement could be endowed with all the powers of the zone districts to coordinate activities within the watershed. The only problem is that it won't be able to issue debt. In the case of the Cascade Water Alliance, they relied on a member agency (the City of Bellevue) to issue the debt needed to construct facilities. In recent years that's been solved by a new structure called the Watershed Management Partnership (RCW 39.34.200) which can issue its own debt. The CWA converted to a WMP, which has very few requirements. It needs a Watershed Management Plan. A process for the Chehalis basin could start with a discussion of policy issues, such as governance, how decisions will be made, what approach to use to figure out how to share costs on projects. If something is built upstream, there needs to be a methodology to see if costs should stay upstream or be shared with downstream citizens. Decisions need to be made about methods of charging. The discussion of policies leads into the formation of an interlocal agreement. The agreement would form an entity, either the interlocal agency or a WMP which can issue debt, which would be the coordinating body for activities in the basin.

Commissioner Averill said that Lewis County formed a zone district in 1998 that they just disestablished last year. It didn't accomplish anything. Commissioners tend to have other problems to deal with on a day-to-day basis. When a district is formed with a governing body that is the BOCC, it runs that risk. Is there an alternative that allows you to put some other body in place to make decisions. Mr. Ghilarducci said that these are probably legal questions that are beyond his ability to answer. Commissioner Averill said that's why a control district was originally looked at instead of a zone district. Mr. Mackey said that after a zone district is established, a separate board of advisors can be put in place to govern it. Mr. Ghilarducci said that's a discussion that happens when developing the policy framework. How the entity relates to the individual counties can be specified in the interlocal agreement. It could be an annual thing for the Commissioners to approve the proposed budget for the basin-wide entity. Once you have an agreement in place, the zones are formed in each county either county-wide or as subzones. A financial analysis would be done to determine how to set rates or taxes. If there were to be subzones to be set up (i.e. in and out of the floodplain) it would happen then. Eventually a bill goes out on the property tax statement.

Mr. Ghilarducci provided some examples. Pam Bissonette, who works with FCS, was involved in the creation of a zone district in King County. They set up a zone two or three years ago. It charges ten cents per thousand dollars of assessed value. They will generate \$36 million this year. The revenue is an annual number which will generally be flat and reliable. It funds capital improvements and floodplain

management programs throughout the county. Commissioner Valenzuela asked how many basins there are in King County. Mr. Batker said he thinks there are five.

Mr. Ghilarducci said that Whatcom County has a zone district, which uses a tax. The Birch Bay subzone has a rate system which functions like a stormwater utility. Whatcom County started with rates based on assessed value and later converted to a tax.

Another example is Washoe County, Nevada. They face a different set of laws so they needed a non-tax approach. Washoe County is one of multiple jurisdictions in the zone district, including Storey County, Reno, and Sparks. The zone district protects citizens from flooding from the Truckee River. They are still deciding on a plan. The proposed rate will generate between \$4.5 to \$17.7 million annually. The rate structure will charge for both regional and local benefit in areas that currently flood. Everyone in the service area will be charged a rate for regional benefit. Special benefit areas that currently flood pay an overlay rate because they will be served specifically. Because they had to come up with a rate they have a benefit-based rate that charges households uniformly and charges other people by developed square feet of floor area. They couldn't use assessed value because that would be too much like a tax. The plan hasn't been adopted yet.

The Cascade Water Alliance is another example. It's a water supply entity serving member agencies in the Seattle area. Rates are charged to member agencies for wholesale water. It was initially formed as an interlocal agency under RCW 39.34 and was converted to a Watershed Management Partnership under RCW 39.34.200. To do this they needed to develop a watershed management plan. Commissioner Averill said that the Chehalis basin has a watershed management plan for ecosystem restoration already. Is that plan related? Mr. Ghilarducci said that it's unclear. Mr. Johnson asked if there's a requirement that the watershed management plan needs to apply to everything in the basin. Could it just cover flood hazard mitigation. Mr. Ghilarducci said that, to his knowledge, it could just cover flooding. Pat Sorenson said that the CWA was formed because other jurisdictions in King County wanted sources of water other than the City of Seattle.

An audience member said that, based on the minutes from last month, it sounds like projects have to be identified before a control district can be formed. Is that true of a zone district? Mr. Ghilarducci said that's not true of a zone district. They can be formed by an act of the BOCC. If you're going to charge a rate, you need to have costs to recover, so there needs to be some kind of a plan. It doesn't need to be an engineered document, however. The audience member asked if, when the system is set up and projects are identified, if the areas in the zone can be changed at a later point with different rates. Mr. Ghilarducci said yes, there are provisions for changing boundaries of a subzone or the zone district as a whole. Mr. Sorenson said you can make the zone district larger or redefine it. Commissioner Averill said the comments last month were made about control districts. To go to a vote, you need a specific plan so the voters know what they're buying into. Control districts are predominantly small, to build a levee for example. One problem is that we don't know what the future looks like because we're still looking and studying options that are out there. If we have a vote of the public in November, we won't be able to point to a plan and say exactly what we'll do.

Mr. Johnson said that a zone district would give us flexibility for project solutions and nonproject solutions. It could change throughout time without going to voters every time we wanted to build a culvert, for example. A zone district provides greater flexibility and the ability to get money for future projects without knowing exactly what they are. Mr. Sorenson asked if this approach gives flexibility for

developing an administrative side. Mr. Ghilarducci said there are a couple ways you can do it. The statute for a zone district allows administrative duties to be delegated. It specifies the county engineer but it can be delegated. If you were to create a basin-wide entity like the Cascade Water Alliance, it could have its own administrative staff and take the work out of the hands of the counties. Mr. Sorenson asked if there would still be accountability. Mr. Ghilarducci said yes, that would be provided by the interlocal agreement. Glenn Carter asked if there could be a separate local entity. Mr. Ghilarducci said yes. Jim Cook asked if there is the option to put the zone district to a vote of the people. The Authority was formed by an interlocal agreement. It seems that, once a zone district is created, the majority of the entities here would have no input. Is there a way to ensure that input is a possibility. Mr. Ghilarducci said that discussion has to occur when planning the policy framework. There's nothing in the law about city participation and consent. However, it's politically imperative that you have those discussions with all parties. The interlocal agreement would reflect that. Cities could have seats on the board of the new entity. You would work that out as part of the initial process. Commissioner Averill said that's why he's curious about the types of agreements King County has with other jurisdictions that are part of the district. If the BOCC was the governing body, the law provides for a 21-member advisory committee that advises the County on what the zone district should do. Commissioner Valenzuela said that one provision is that once the commissioners vote, they can be the governing board or they could establish a board of supervisors. Mr. Sorenson said there is plenty of flexibility in the interlocal agreement.

Commissioner Averill said that this discussion will have to continue on in the future. When we originally started out we pulled together the three counties and the Chehalis Tribe and settled on a control district. The members that were part of that discussion have changed significantly. And we have run into some problems in terms of implementing a control district at this point insofar as a control district has to go to voters and there has to be a specific plan put on the table if you anticipate voters will approve a control district. Commissioner Averill said that if you choose a zone district because it can be done by the BOCC, you are expecting commissioners to make decisions that they may not be ready to make politically. We need to have further discussion on which direction we need to go, both at the Authority level and with the county commissioners of the three counties and the Tribe. As we get toward a point where we have facilities that need to be constructed, operated, and maintained, we need to have a governing body with the responsibility of doing that. That's a discussion we need to have sooner rather than later.

Commissioner Averill said that the Authority still has important decisions to make regarding flood districts. If the legislature approves the supplemental budget we provided, there will be money for the process of developing a plan to form a district. It will take expertise to get where the Authority wants to go and figure out its options.

Commissioner Averill asked the Authority members to think about the coordinated study and the upstream storage analysis during lunch as they will be important issues on this afternoon's agenda.

6 . Adjourn

As there was no other business, the meeting adjourned at 11:26 A.M.

**Chehalis River Basin Flood Authority
Lewis County Courthouse
351 NW North St.
Chehalis, WA 98532**

**December 17, 2009
Meeting Notes**

Members Present: Dolores Lee, Town of Pe Ell; Karen Valenzuela, Thurston County; Ron Schillinger, City of Montesano; Dan Thompson, City of Oakville; Jim Cook, City of Aberdeen; Ron Averill, Lewis County; Patrick Sorensen, City of Centralia; Mark White, Chehalis Tribe; Merlin MacReynold, City of Chehalis; Terry Willis, Grays Harbor County

Members Absent: Town of Bucoda

Handouts/Materials Used:

- Agenda
- Meeting Notes from November 19 Work Session and Business Meeting
- Ripe and Ready Studies Report
- Proposed ESA Adolphson Contract Amendment
- Memo from City of Chehalis
- Coordinated Study
- Upstream Storage Analysis Phase 2B
- Expenditure Review
- Memo re: Election of Officers

1. Call to Order

Chairman Averill called the meeting to order at 1:36 P.M.

2. Introductions

The Board members and audience introduced themselves.

3. Approval of Agenda

The agenda was approved without objection.

4. Approval of Meeting Notes from November 19, 2009

Chairman Averill stated without objection the meeting notes from both the general meeting and work session would be approved. There was no objection and the notes were approved.

5. Public Comment

Ms. Julie Powe, Chehalis, stated she has been following the Flood Authority since its inception and is pleased with the unity with the Flood Authority, the Corps, the State and Legislature. She encouraged the Board to maintain Chairman Averill and Vice Chair Willis in those positions. She addressed the resolution for Phase 2B. As a member of the committee to write the PMP she initially was pleased with the resolution; however the Corps has not come forward with the material needed to get the PMP completed in a timely manner. The next meeting is not until February and the Plan is not even a quarter complete. Ms. Powe believes the committee needs to move forward with the studies so if there is a chance of merging with the levee plan it can be done without sacrificing the money.

Chairman Averill stated this is a topic to be discussed later in the agenda today.

Mr. Dave Finn, Curtis, stated he would not be personally affected if dams were not built but he knows a number of people who would be affected. He believes people need to find out if the dams will do what it is hoped they will do and help everyone down river to Aberdeen. He encouraged the Flood Authority not to slow down; he understands that the wheels of government turn slowly but he also knows that the Flood Authority can have an effect on how fast those wheels turn. He asked not to slow down on the Phase 2B and keep the pressure on the Corps to work to find a total solution that will help everyone in the Basin.

6. Reports

a. Chairman's Report

Chairman Averill summarized the work session held this morning. The Flood Authority contracted with Earth Economics to do a study of the Chehalis water shed in terms of the environmental and economic aspects. Mr. David Batker briefed the members of the initial phase of the work, which is to place an economic value on what that environment provides to the population. All the data has not been collected and the documents on which they can scientifically base data are quite divergent. The initial evaluation is that we get between \$1 and \$11 billion of value of what the environment provides the citizens in the Chehalis Basin, the watershed and the State of Washington. As the work continues, the numbers will be firmed up and the types of projects will be looked at by the Flood Authority in what we can do in terms of flood mitigation and economic issues.

Another issue discussed was the formation of a flood control district under RCW 86.09 and 85.38. The question was whether that was the best route to take and if there are other alternatives. A firm that consults with flood zone districts gave some preliminary information as to what flood control zones can or cannot do. There are a number of options and before a decision is made about a flood control district or flood zone district there will be additional studies and discussion of procedures, the governing body, the boundaries, and many more questions. It is generally agreed among most Flood Authority members that some sort of governing body is needed to solely look at flood control. This may require more meetings between the jurisdictions and the Tribe.

Chairman Averill stated the supplemental budget made it into the Governor's budget which is very good news. Mr. Mackey will explain more about this.

At the last meeting, Commissioner Willis asked for additional information on the EES billing and received a response on that. Commissioner Willis asked for an itemized breakdown of expenses and what the Flood Authority is paying for and she has received that information from Mr. Muller. Chairman Averill stated the information is available for anyone who would like to have it.

b. Member Reports

Mr. Schillinger asked who the sponsor is of the Twin Cities Project. Chairman Averill stated the State is the non-federal sponsor and the Office of Financial Management specifically.

c. Correspondence

The Chair and Vice Chair are working with Ms. Takash with the Corps on correspondence to go out to individuals who left comments at the open houses. A matrix has been drafted with all the questions and

people are being directed to specific groups if they need further explanation. There will be additional open houses where those issues can be brought up.

d. Facilitator's Report

Mr. Bruce Mackey introduced Ms. Marjorie Wolfe, ESA Adolfson Regional Director for Water Resources who heads the Portland office. Her capacity will be similar to Dave Carlton, who is still on the project and providing technical advice. Ms. Wolfe has a water resource engineering degree and 20+ years experience and will be a tremendous asset for the Flood Authority.

The sub-committee asked for a report from Ecology on Phase 2A to ask about fatal flaws. A letter was received from Ecology with a generally good review and statement that they saw no fatal flaws on what has been done to date.

Chairman Averill asked Spencer Easton to be sure everyone received a copy of that letter.

Mr. Mark White stated there was a concern about sedimentation and Mr. White believes this should be addressed early on.

Mr. Mackey stated the regulatory work group has met three times and are in the final stages of reviewing their report. That report will most likely be on the January agenda.

Mr. Mackey thanked the governor's office for the supplemental budget. This budget will allow the Flood Authority to continue with the consulting services and it includes \$720,000 for potential projects or extension of work, as well as \$1 million to study the formation of a flood control district.

Mr. Thompson asked where in the process is the flood mitigation plan.

Mr. Mackey stated the first draft has been issued and ESA is working with the Board Advisory Committee to set up a process for review and the draft for final consideration will be available in March.

Mr. Thompson asked if it will then go to Emergency Management or FEMA.

Mr. Mackey stated the Flood Authority will decide how it will be adopted after public hearings.

e. State Team Report

Mr. John Donahue reported on the Twin Cities project. The letter that went out regarding the questions from the open houses included a table with the questions and answers. That will be posted on the website: Chehalisbasin.org.

There is emerging information from the Twin Cities project which includes an update in the project schedule and a report on the hydraulic modeling effort. Mr. Donahue proposes a meeting with a mix of the Flood Authority and Flood Authority staff and state agency staff to discuss those issues. Other questions could be brought to that meeting. The last Thursday in January is a date that might work. He asked that the Flood Authority consider staff that would be helpful in those two issues.

Mr. Donahue stated he would send out confirmation of the meeting on January 28, most likely to be held in the morning and the location to be determined.

Mr. Schillinger asked if the Skookumchuck Dam has issues with the modification, or if it is part of the Twin Cities project.

Mr. Donahue stated it is part of the project. Mr. Goss' staff is working on questions and working with Trans Alta regarding specific proposal and vetting those proposals. There is a proposal in the general evaluation report, which is still in the development and analysis stage and will not be available in January.

Mr. Schillinger stated he agrees with Mr. Finn's earlier statement. The Flood Authority has been working on flooding for a long time. Everyone would benefit by something being done and if there is anything close or makes sense, it is at the Skookumchuck Dam. He doesn't believe additional permits are required and it will not cost a lot of money and will provide broad benefits.

Mr. Goss stated the Corps is looking at the national economic development plan which proposes 11,000 additional acre feet and the locally preferred plan which would be 9,000 acre feet in addition for storage. The Corps needs to get rough designs and costs for that and perhaps additional information, such as permits, time frames, etc. That information is a couple of months out.

f. Corps of Engineers Report

Mr. Goss stated the Corps is working on submitting a complete preliminary draft of the PMP to the working group on January 29. A tentative schedule includes:

- January 29: Submit the plan
- February 7: Receive written comment from reviewers
- February 12: Agenda
- February 20-21: Meeting to go through comments

Another meeting will be needed with the planning people to talk about in-kind work. Hopefully this meeting will take place in February, also.

Chairman Averill stated we are looking at projects we are hoping would be part of the Basin-wide study in terms of match. He understands the lawyers are currently looking at this and there may be some answers in early January.

Mr. Goss stated the legislative language that formed the Flood Authority was used for the inter-local agreement. Can we use this based upon the time that the Flood Authority was signed and the work that has been done and submit it for in-kind work? He hopes to have an answer to that by early January. If we can go forward we still need to look at all the work that has been done and how the processes work and what portion of that dollar figure would be credited towards it.

Mr. Schillinger stated this project has been discussed for ten years. The funding is there but with the Corps constantly changing or re-evaluating the process is still five years away from implementing anything. He asked if there is any way to move that along.

Mr. Goss stated there may be some smaller dollar value projects that the Corps could look at under some other programs, rather than the General Investigation. As those come up the Corps could have the planning people take a look to determine rough dollar values and pull some of those out.

Mr. Donahue stated he has a list of staff people who attended the meeting about a year ago and he will send notification to those people. If there is anyone else who should be notified, please let him know.

g. Lewis County PUD Report

Mr. Muller stated he has no new information since the last meeting when the Phase 2A geotechnical and scoping documents were distributed. When the Flood Authority authorizes Phase 2B the PUD will be ready to move forward.

OLD BUSINESS

7. Ripe and Ready Studies Report

Mr. Mackey discussed the upstream storage phase 2. A proposed scope and budget was presented to the Flood Authority. A resolution was requested and that will be discussed later in the agenda today.

Regarding the early warning system, West Consulting did hold six meetings and there will be a follow-up with questions from individuals and with early warning management people to finish putting their report together.

Mr. Mackey stated Mr. Batker, Earth Economics, should have a draft report next week.

8. Proposed ESA Adolfson Contract Amendment

Mr. Bob Johnson stated Lewis County is the lead agent to the Flood Authority with respect to contracts for funding through OFM. ESA Adolfson has been doing all the facilitation work that was previously contracted for. Some things that had not been contracted for, but they have been asked to do, need to be covered in a supplemental contract. There is a little money left in the original budget that was unallocated and ESA Adolfson prepared a scope of work for the additional necessary involvement in which they are participating. Before the Flood Authority is a resolution that will go to the Board of County Commissioners next Monday, asking for funds not to exceed \$80,000 for the remainder of the fiscal year ending June 30, 2010.

Chairman Averill stated a resolution, the ESA Adolfson contract scope of work, and the compensation is included in the member packets. The total is \$79,255. He asked for questions or comments.

Mr. MacReynold stated his concern is \$80,000 and the consultant who wants to spend it. Is this value added service to what this Authority wants or is it just money we want to spend?

Chairman Averill stated there are some issues on different tracks. When the Flood Authority first made the agreement with ESA Adolfson for their current work with the Authority, the GI study was not in that statement of work. We have had to rely on ESA Adolfson to get that project together and do the scoping with the Corps. They have been doing part of that by using monies that were allocated to go to something else. We are trying to provide the money for this major change in the project scope of work for ESA Adolfson. Another issue is: originally when the open houses were conducted, the Flood Authority needed to participate and we relied on ESA Adolfson to put together all of the brochures and to man the tables at three open houses. This was not part of their contract and that issue was added into the scope of work to compensate them for work not initially included.

Mr. Schillinger stated Mr. MacReynold's question was a good one, but having been through all of that, Bruce and ESA Adolfson has already earned the money. Mr. Schillinger moved to adopt the Resolution and addendums.

Chairman Averill stated without objection, these documents would be adopted. There was no objection.

9. Memo from City of Chehalis

Chairman Averill stated Mr. Taylor had presented a memo from the City of Chehalis at the last meeting. It was essentially flood reduction project issues done cooperatively between the cities of Chehalis and Centralia to look at side issues to the Twin Cities project. The Chair asked Mr. MacReynold what the intentions are and to whom this memo should go.

Mr. MacReynold gave some background. On January 14, 2008, days after the 2007 flood, the cities of Chehalis and Centralia passed a joint resolution trying to figure out how the cities would recover, prior to the existence of the Authority, and that the two cities had to take some action to put people on notice that the only project being discussed at the time was the Corps project. Both jurisdictions voted against supporting that Corps project because of certain items that clearly helped in some places in the cities and harmed other locations. The City Councils took action to put the Corps on notice about the things that made the Councils vote against the Corps project that was on the table earlier. A few months ago Mr. MacReynold was informed that no one knew anything about these other things that the cities had been discussing and the best vehicle to bring this to the attention of the Corps was the Flood Authority. We felt it was important to share that resolution and to hopefully gain the support of this body and put the Corps on notice that they need to look at these and be able to respond to them if it wants support of our communities.

Mr. Goss stated when the Corps holds a meeting on the Twin Cities project on the 28th of January one thing the Corps wants to address is the tributaries: which ones the Twin Cities will cover, are we comfortable with the level, are there some that are not being addressed.

Mr. MacReynold stated the Cities are looking forward to that meeting and appreciate the Corps moving forward and looking at these items. At the same time, the Corps needs the Cities' support and requirement, at least if the Governor stands by her word that if our communities say "no" it is not proceeding. We want the Corps project to proceed but we also need to be able to say to the people who have been harmed before that we are doing everything we can.

Commissioner Willis understood after the discussion with the Colonel that the GI study was already done and in place and they were ready to move forward. Are you trying to bring these approved items into the GI study and were they there originally, and if you do it now, will you slow it down? The Colonel was very explicit that if we change the GI study at all he stops what he is doing.

Chairman Averill stated we are beyond the GI study. There is a Project Management Plan for the Twin Cities project. The original PMP was written in 2003 and he assumes there is a new PMP that the OFM has written with the Corps.

Commissioner Willis stated this is an authorized project and if these were not included the first time and we ask them to be included this time, does that "unauthorize" the project?

Mr. MacReynold stated he cannot answer that. These items were not included in the original 65% that prompted the City of Centralia and the City of Chehalis to vote against support. If the Corps has not made any adjustment on its current plan, then our cities could vote against it. They cannot support any project that may stop the freeway from flooding and flood residents in our communities.

Chairman Averill stated in the original 2003 PMP many of the issues that are here were outside the scope of the project based on the cost benefit ratio that the Corps used at that time. One reason Chairman Averill was an advocate of the basin-wide plan is there were holes in the project and it did nothing for the upper basin and very little for the lower basin; therefore a basin-wide solution was needed to look at other alternatives. We are taking 2007 and 2009 data and putting them in the 35% design. When we meet on the 28th we need to speak to some of these issues to determine what holes still exist. That does not necessarily mean that if we continue to have a hole that we won't work on it in the new GI study. The memo is good in that it identifies the reservations that the two cities have as we look at this project and have to be addressed.

Commissioner Willis wanted to understand if these were in the original project or do we need to move them forward. Now you have alluded that they can be moved to another GI. We need the process clarified.

Mr. White thought these should be on the list of projects that was drafted a year or so ago. Every jurisdiction has these types of issues; we have 200 projects and we can't push five or six.

Mr. Sorensen stated we should know on January 28 whether or not this is an issue based on what Mr. MacReynold discussed. Does it slow down what is going on or can it be worked in or addressed? Some of the creeks have been talked about.

Chairman Averill stated the secondary access to the hospital will be resolved predominately by the new Mellen Street exchange. He asked the desire of the Flood Authority: do we want to note this for the record or should this be forwarded to someone?

Mr. MacReynold stated on the second page of the report the City of Chehalis is requesting support from the Authority the inclusion of the projects listed as part of the Twin Cities project. He made a motion that the Flood Authority would support consideration of these issues as part of the project. Mr. Sorensen seconded.

Commissioner Willis is concerned that the Flood Authority is insisting that these be included as part of the Twin Cities Project. This is already an authorized project and we are stating these items need to be included. Commissioner Willis is not sure they are in the project at this time and she does not want to take the burden of stopping the Twin Cities project because of something she is unaware of. She needs more information. It is not that she does not support these projects; they are most likely within the scope of things that need to be done, but she goes back to the conversation with the Colonel. Can we back this up and if so, how far?

Chairman Averill stated there is a "magical" 20% and we don't know what that is.

Mr. MacReynold stated the Corps was aware of that resolution in January of 2008. This is nothing new but the information he has is that there is need of formal support to ensure that at least these things are

considered. If we don't do that then we have not provided due diligence for our residents. The City of Chehalis does not wish to slow down the project but the Corps needs to be able to articulate either how it has incorporated these things or why they have not and therefore how they will be mitigated.

Mr. Sorensen agreed with Mr. MacReynold. It is not Centralia's intent to slow the project. He hopes the 28th will be the opportunity to address these issues.

Commissioner Willis suggested changing the last paragraph on the resolution to state "the City of Chehalis is requesting support from the Authority for consideration of the projects listed" as opposed to "for inclusion of the projects".

Chairman Averill asked if this could be considered a friendly amendment and Mr. MacReynold stated yes. Many of these are already included in the project, though not all.

Mr. White suggested tabling this until after the 28th if these questions will be answered at that time. The City of Chehalis could amend the resolution depending on the answers they receive.

Commissioner Valenzuela seconded to table the motion.

Mr. Schillinger spoke to both issues. Centralia and Chehalis need to consider this: those of us from down at the lower end drive up I-5 and see you continuing to fill in the flood plains as if that had no impact or affect. We are very empathetic to the people who flood but you can't create additional problems and then expect to be bailed out. Where are we regarding that issue?

Mr. MacReynold stated the City of Chehalis complies with all state and federal regulations with reference to fill. All development has to meet those standards.

Mr. White asked if filling in the flood plain is appropriate as long as long as all state and federal regulations are met.

Mr. MacReynold stated as long as those regulations are met, yes.

Commissioner Valenzuela called for the question.

Chairman Averill stated there were two nays and the Authority is under the constriction of consent unless no agreement can be reached. Either the nay votes must be swayed or there needs to be a 60% consent.

Mr. Cook stated he believes the Authority has more things in common and more positive things going for it than the negatives. He agrees that every item on the list is important for the communities, as well as the items on the lists of the other jurisdictions. It is agreed that additional information is needed to make an informed decision and based on that tabling the motion until the January 28 meeting is the best course of action.

Commissioner Valenzuela stated that the rules of procedure need to be reviewed. It is not consistent to say that we operate by consensus and then permit the making of and voting on motions. This motion was passed by a majority of voters.

Chairman Averill stated the rules of procedure are the rules and each member has a copy of them. They are the same rules of procedure used in the Chehalis Basin Partnership. The requirement is to try to come to consensus. If we cannot come to consensus, then we need 60% majority.

Mr. MacReynold asked the Chair to repeat the tabling motion.

Chairman Averill stated as he understands it, this motion is to be tabled until after the meeting with the Corps on January 28 to see what issues will be addressed in the Twin Cities Project. The motion will be taken up again at the next meeting of the Flood Authority in February.

Mr. MacReynold stated for the sake of maintaining a good working relationship with the Authority he recommended supporting the table motion. Mr. Sorensen agreed.

Chairman Averill stated now there was consensus and the motion was tabled until the February meeting.

10. Coordinated Study

Mr. Mackey stated the member packets include a memo from ESA Adolfson regarding the potential coordinated study. Going back to the joint meetings with Chehalis and Centralia and the comments received at the open house, how do you consider both of these projects at the same time and is there a way to analyze that. Is there a way to look at consistent information between the two projects, the upstream storage and the Twin Cities Project, and is there a way to do that in a timely manner rather than waiting for the work to be done in the basin-wide GI. The concerns expressed at the council meetings and the governor's office did not fall on deaf ears. In fact, the governor's office proposed an independent study to determine if the two studies could use common data and perhaps look at a combination of the two. A group of people from the Authority, Congressman Baird's office and agencies thought it might be timely and less expensive by using the people who are currently involved to make this work. The PUD's proposed phase 2 already states they are willing to do their work in compliance with the Corps standards.

The purpose of a coordinated study would be to develop comparable data on the benefits costs and impacts of both the Twin Cities and the project and various combinations of those. That would take some additional work that would augment the PUD work currently being considered.

Your facilitator has tried to get those discussions mature enough to bring to you with a question. If you agree with that effort, simply authorize ESA Adolfson to work with those various people to see if we can bring that type of proposal forward. This is an exploratory effort to determine if that is a direction the Flood Authority would like to take. If it is ESA Adolfson will pursue it.

Mr. White understands the letter to say that the Flood Authority has decided the levees or dam are the only solutions, or various combinations of those two projects. We haven't looked at any other alternative.

Mr. Mackey argued that the reason for the basin-wide GI is to look at a basin-wide solution. This addresses one critical question, which is: is there a way to look at these two in a comparable and timely way. That does not preclude doing anything else.

Mr. White asked if the Corps didn't already look at dams or this combination.

Mr. Goss' comment was yes.

Chairman Averill stated when that question was asked in 1982 it was in response to the Twin Cities Project which was to provide protection to Centralia and Chehalis and the transportation corridor going through it was not a basin-wide look.

Mr. Goss' comment was that is true.

Chairman Averill stated that referring back to the answer given he suggested it is apples and oranges; it is a different question. The other aspect is to consider the potential water retention project based on putting power generation into it. There are some other possibilities that involve water retention. One that might require the least work is water retention capability. What kind of dam would we need for that, how big would it be, and what would the costs and benefits be. Is there a benefit to improving the quality of the water in the river and if we did a project just for water retention and water quality improvement what would that look like. Another possibility is the full-scale project, which has been contracted for with EES. This is also saying we need to look at options other than a big project that includes all three of those.

Mr. Mackey stated this is intended to address the issue which is why aren't these two projects being looked at? There is not enough time to look at them if you wait for the GI. We are not trying to preclude a basin-wide solution or that it would not be complementary to something else. What is proposed by the governor's office and discussed by this group is if this is something you want to look at and do in a timely manner. We don't have a lot of the detail because you have not stated if this is the direction you want to go.

Mr. MacReynold asked if this proposal impacts the timeline for either project.

Mr. Mackey stated it does not for the Corps project. That is going along its designated schedule. At this stage the PUD project is going forward. The Phase 2B has been proposed and that will be considered at the January meeting. Depending on the answers you get from the Corps regarding what counts as match and if it does not count as match do you want to delay. If there is some augmented work that could answer the question of a coordinated study there may be some minor things in the PUD project that they could change in either scale or timing. Mr. Mackey is not proposing any of that at this time. He is assuming the two are going ahead but this is one way to compare the two and answer some of the questions that you are being asked.

Commissioner Valenzuela stated this information might have been more appropriate to bring to a work session rather than trying to work it out during the Authority meeting.

Mr. Mackey stated that is exactly what he wanted. He is saying this is an idea and if you like it ESA will spend time working on it and bring it to the next work session.

Ms. Lee stated she would like to look at all possibilities before making a final decision.

Chairman Averill stated with no objection the Authority would move forward to looking at this project and bringing it to a work session. There was no objection.

11. Upstream Storage Analysis Phase 2B

Mr. Mackey stated the resolution in the packet, pages 1 and 2, state the way this has been done in the past is to ask the PUD to present a scope and budget to the sub-committee and they in turn will make recommendations to the Flood Authority. The third part could be postponed because of what the timing is and if you want to have this work proceed and not know whether or not it counts as match. Hopefully there will be more information on that in January.

Mr. Thompson noted the agenda states the Flood Authority will review the draft resolution to approve the Phase 2B of the upstream storage analysis. He asked if Mr. Mackey is recommending waiting for another month and go through another work session before action is taken.

Mr. Mackey thought the sub-committee could start the work and put the interlocal agreement together. He suggests waiting until the Flood Authority knows what the options are in terms of this counting as match until January.

Mr. Thompson agreed.

Chairman Averill spoke on behalf of Lewis County, stating Lewis County would be concerned if this was put off past January because the study is in hand and the continuation of the work in 2B is important. We have a sub-committee that has made a recommendation to us on how to proceed. He appreciates and supports that if we can make this work part of the basin-wide study and get credit for it that it is to our advantage; however he would not want to put this off until February or March to make that decision.

A motion was made by Ms. Lee to table the recommendation until the January meeting; seconded by Mr. MacReynold. There was no objection and the motion was approved.

NEW BUSINESS

12. Expenditure Review

Mr. Bob Johnson summarized the report. There is a balance of unencumbered funds of \$135,347. That would change with the authorization for ESA Adolphson to continue with the additional scope of work. With that in mind, the balance remaining of expended funds is \$1.4 million. The encumbered funds are funds that were encumbered for studies including some of the work that is in progress. We still have a balance and can make it through to June 31. Other goods and services is the category where staff other than Lewis County staff charges for time they spend, particularly Thurston County and Grays Harbor County. There is no money left in that fund. There is money in the overall budget but Mr. Johnson has been informed by OFM that we need to do an amendment to the supplemental agreement that we already have with them to shift some money from category to category. Looking at the salary and wages and employee benefits that were originally authorized for Lewis County it is not going down at that rapid a pace. There is still a little over \$22,000 left in those two line items. With the Authority's permission, Mr. Johnson will draft a second supplement to the interlocal agreement with OFM and switch some of the monies around so there is enough money to pay for the staff support for the BAC. Lewis County will not need all the money allocated for its staff. Although the original case manager

stated there were no concerns as long as we didn't spend more than \$2.5 million the current OFM manager is concerned that we don't overspend each line item.

With the Authority's permission, Mr. Johnson will submit a supplemental agreement at the next meeting.

Chairman Averill asked that Mr. Johnson add to that the negative flow in the consulting services issue.

Mr. Johnson stated we have the capacity to do that and it will be done.

Mr. White stated at the last meeting Chehalis requested a copy of what the Lewis County Prosecutor's Office work is and what is paid to them. He has not seen that information yet.

Chairman Averill stated a more detailed expenditure description was requested and it can be sent to the members.

Chairman Averill asked if there was any objection for Mr. Johnson to submit a supplemental agreement to OFM. There was no objection.

13. Officer Elections

Chairman Averill stated elections could be held at this meeting or in January.

Mr. White suggested waiting until January since Commissioner Willis was no longer present at this meeting.

Chairman Averill stated elections would be on the January agenda.

14. Confirm Next Meeting and Board Requested Topics

The next meeting of the Flood Authority will be Thursday, January 21 at 1:30 p.m. There will be a morning work session beginning at 9:00 a.m. at the WSU Extension Conference room in the basement of the courthouse. The Chair made note of the meeting dates and times for 2010 shown on the agenda for the members' reference.

15. Adjourn

There was no other business to come before the Flood Authority and the meeting was adjourned at 3:15 p.m.