1. 6:30 P.M. CALL TO ORDER
Commissioner Nelson called the September 7, 2011 meeting of the Thurston County Planning Commission to order at 6:30 p.m. Commissioners provided self-introductions.

Attendance: Commissioners, Christine Spaulding, Bill Jackson, Edward Fleisher, Christopher Earle, Scott Nelson, Kathleen O’Connor, Jennifer Davis & Liz Kohlenberg

Absent: Chris Lane

Staff: Scott Clark, Cynthia Wilson, Jeremy Davis, Andrew Deffobis, Olivia Story & Tony Kantas

Guests: Doug Meyers, People of Puget Sound, Science Director & Pene Speaks, Natural Resources Department Heritage Program

2. 6:31 P.M. APPROVAL OF AGENDA

MOTION: Commissioner Spaulding moved to approve the agenda. Commissioner O’Connor seconded. Motion carried.

It was agreed that the Work Session for Mineral Lands – GMHB Compliance would be taken off the agenda for the evening until the materials could be presented by staff. Pene Speaks with the Department of Natural Resources Heritage Program was also added as a guest speaker.

The times on the agenda were then discussed. Commissioner O’Connor wanted to know if the meeting going past 9:30 p.m. would be a normal occurrence. Mr. Clark stated that the meetings will be running later during the review of the CAO and Mineral Lands to try and stay on top of the time lines. It was also discussed that if the meeting would be going past 9:00 p.m. that the chair would acknowledge it was 9:00 p.m. and ask if the Commission would still like to continue or table a subject till the following meeting.

3. 6:34 P.M. APPROVAL OF MINUTES

Commissioner O’Connor moved to approve the August 3, 2011 minutes and accept the audio as the official record. Commissioner Kohlenberg seconded. Motion carried.

4. 6:36 P.M. PUBLIC COMMUNICATIONS (Not associated with topics for which public hearings have been held.)

1. Mark Kelly – 3419 Lynn Court NE Lacey, WA 98516 – Spoke in regard to the Agritourism Ordinance and CAO.
The official audio is available online at:

http://www.co.thurston.wa.us/planning/planning_commission/planning_comm_minutes.html

5. 6:42 P.M. **STAFF UPDATES**

Mr. Clark provided the following staff updates:

- On September 22, 2011 there is a short course on local planning being sponsored by the League of Woman Voter’s.
- The Planning Department was awarded the Habitat Conservation Cooperative Agreement. The agreement is for $450,000. This will start taking place in November.
- A letter from a homeowner to the planning commission was passed out in regard to public water systems.
- The location for the CAO public hearing was discussed and running the process the same way as the BOCC hearing prior. The location discussed was superior court with overflow rooms, and a better audio visual system so everyone can hear and watch the hearing. The planning commission discussed different venue locations and the pros and cons of each venue. Staff will be looking into setting up the public hearing and the details.
- The mineral lands issue will be broken into its own appendixes. Growth board conclusion, science, analysis and recommendation and this is what is causing the delay. This will create a solid record. The Planning Commission would like to have a map which displays exactly what the proposals are discussing.

6. 6:49 P.M. **WORKSESSION: CAO CARA’s**

*Staff: Scott Clark, Cynthia Wilson, Jeremy Davis & Andrew Deffobis*

Mr. Deffobis briefly introduced materials that were passed out to the Planning Commission for review. The first, a memorandum dealing with critical aquifer recharge areas and what is within the rest of the packet of materials. Second, the draft chapter of Critical Aquifer Recharge Areas (CARA’s) was handed out. Third, a CD with partial best available science and other data to support said draft chapter. In the future, the other supporting documents that the planning commission has become accustom to will be passed out however staff has not completed at this time. Staff is still discussing the CARA’s chapter and may have further changes and is hopeful that the planning commission will engage in the same discussion with staff as well at the meetings. A short discussion ensued. The CARA work session will be in the next couple of meetings.

7. 7:00 P.M. **PUBLIC HEARING: Open Space**

*Staff: Olivia Story*

Ms. Story briefed the commission on the one open space application that needed to be considered. The purpose of the tax program is to preserve land and in exchange give the
property owner the benefit of a tax shift. Staff completed its review of the open space tax program application, considered the merits of the proposal, and found it to be appropriate for the open space tax classification and an asset to the County. After the public hearing on September 7, 2011, a vote may be taken and recommendations made accordingly. A brief outline of the application in question was then given.

Commissioner Nelson opened the public hearing at 7:03 p.m.

No public comment was given.

Commissioner Nelson closed the public hearing at 7:03 p.m.

MOTION: Commissioner Spaulding moved to recommend approval of the Wald Property Tax Program application to the Board of County Commissioners. Commissioner O’Connor seconded. Motion carried.

7:05 P.M. WORKSESSION: CAO Frequently Flooded Areas
Staff: Scott Clark, Andrew Deffobis, Cynthia Wilson & Jeremy Davis
Guest Speakers: Doug Meyers & Pene Speaks

Pene Speaks from the Department of Natural Resources was introduced. Ms. Speaks will be talking about the Natural Heritage Program in relation to the Critical Areas Ordinance. A power point presentation will also be given to cover the Natural Heritage Program and what it does and what some of the services are that the Natural Resources Department provide. Some handouts were passed out to the commission as well as copies of the power point presentation.

The Washington Natural Heritage Program started in 1977. The program was started thru statute RCW 7970. It is the only comprehensive source of scientific information on rare plants and ecosystems for our state. It was placed in the Department of Natural Resources in 1981.

Detailed section starting at 00:39:46

Pene Speaks: So, who are we? The program is comprised of a number of scientists; we have the rare plant botanist for the state to plant ecologists, zoologists, thank you very much. And these are people who are truly expert in their field. They’re recognized not just locally or just within the state but they have national recognition. We have creditable experts, and the program primarily focuses on ecosystems and rare plants, with some rare animal information. What does the Natural Heritage Program do? Well, we really do three primary things. First of all we catalog and prioritize what’s in the state from an ecological perspective that is what plants, animals and ecosystems occur in Washington and which ones are in need of conservation. Where are the species we inventory? So where are those species and ecosystems, and then what kind of condition are they in? Are they pretty secure, think of black tail deer? Are they pretty rare, think of golden pink brush and we identify what’s common and what’s rare and we track those things that are more rare. We don’t track deer. And then we support conservation action. When we’ve
identified those things that have high conservation concern then we work with partners with a lot of local folks, with our own departments the department of Fish and Wildlife to identify ok what do we do about that? Is this something that we need to protect long term what does protection look like? And identify those tools that have worked the best. So a big part of what the Natural Heritage Program is engage in 41:47 not only collecting that scientific information but also then doing conservation planning. The natural heritage plan is by legislative direction, updated every two years, normally every two years, every biennium to identify areas that are critical for long term protection. So one thing that the program does and that the plan identifies is areas that are really important for long term conservation in a natural area system, which I will talk with you about in just another minute. So some of the benefits and services that we provide, scientific information to support sound land use decisions we’re the only source of information in the state comprehensive source, you can get snippets’ from everybody else but we take everybody’s information and put it in our database and compare who has what information about what and from that we identify what the conservation priorities need to be. We provide information for green certification, for forestry for instance and we try to provide objective information that is, our information is based on percale data that is what we know and what information we get from individuals and agencies and organizations around the state. And then we also provide field guides and educational information so, let’s talk a little bit about that. Once thing that we provide is scientific information on locations of where plants and ecosystems and if you see those little purple polygons up there those that group is a particular plant that’s called, it doesn’t have a lovely name whitened milk bitch, however, I know isn’t that lovely? It actually is a very beautiful plant it just got a terrible name this grows over in the eastern side of the state and what you’re seeing there is the world population of it, but those little polygons are the plant populations themselves that’s where the plants grow this actually part of this is within the actual area preserve because of the rarity of this plant. We also provide information on our rare animals, we have on our website, our arterial website, what’s called the Washington Herp atlas so it tells you what were amphibians and reptiles you might find locally and in the state and gives you identification keys, that kind of sort of thing, so lots of good information about that. This is representation of information on rare plants that we have throughout the state. So there are a lot of occurrences that we track. I can’t remember how much we have in our database but its several thousand populations and what we call element occurrences that is it’s not just if you find a single plant growing some place, that doesn’t mean that it’s a natural heritage feature. If you have a population of a thousand plants that are very rare or you can’t find very much that is likely what we would call an element occurrence, a natural heritage element that is significant enough to be considered protecting or paying attention to because size, rarity and viability is important. So if you go to our website you can find lots of information I know you cannot read yet but what I do want to point out is if you’ll notice on the left side there under, this is on our reference desk part of our website and you can find here a list of where plants for instance or ecosystems by county as an example. And the reference desk has information on both ecosystems and single species and plant associations, we also have field guide to rare plants and we have a field guide to ecological systems for folks that are interested in that. So you can go find the rare plant lists and here is the one for Thurston County, this is just a screen shot so I can’t roll down
and show you all of the information but as an example you can find all of the rare plants that we have tracked by County so for Thurston County you would find that and then you can go to the information about that rare plant and get a picture, get some identification information and location and ecology of it also.

Commissioner Davis: Can I interrupt you really fast?

Pene Speaks: Absolutely.

Commissioner Davis: You said we could.

Pene Speaks: Yeah, Yeah.

Commissioner Davis: So what scale, I think that you’re going to cover this but what scale of information is available in terms of location scale. I know Fish and Wildlife has location information in their database and they get down to even the parcel scale in some of that. I wasn’t sure what scale kind of you got down to and if it depends and the second part is how accessible is that information to the public?

Pene Speaks: The first part is that we get down to pretty small scale, we actually do map occurrences that are sometimes acres in size. The answer to your second question is, it depends. If it’s a very rare plant we buffer that information so the public can see ok, there is a rare plant here somewhere. Maybe it’s within the section so that’s kind of an important “inaudible”, as a buffer, as an example. However for a land owner or for you all or for the county we do provide that exact information. We can provide that for general public information because of some of the rarity of the species that we track, we do buffer some of the information. Ok. Alrighty, and “inaudible” one of the things that we did recently, is collaborated with several folks including the bureau of land management and Washington Native Plant Society to public a rare plant guide in Washington. First of its kind. And it has again great information shows the county were in species are found but also Jennifer pretty buffered so you wouldn’t be able to use this map and go find a plant necessarily.

Commissioner Jackson: And it’s to protect the “inaudible” from the crazy people that are out there, they destroy that beautiful plant? I mean “inaudible” the way the world is going you would think that there are people that would look at that and try to destroy it.

Pene Speaks: Unfortunately there are and there are people who are good meaning and intent, they just want to go gather some for their garden.

Commissioner Jackson: Oh I see, that’s about nice of them.

Pene Speaks: Unfortunately, that happens more often and in many instances, one of the reasons why these plants are rare is when you try to do anything with them they just die. So it’s a particular problem on the eastside where we have most, well I just, we have a lot of rare plants on the Eastside, because conditions are difficult there and trying to move
plants or trying to you know take a few seeds or can really have an impact. So that is one of the reasons why we do buffer it. So who uses the services and the information? Certainly, County planning departments. Who queries our database probably more than just about anybody our County planning departments. We get a lot of requests for information for project review for critical areas implementation etc. And we do provide that information like I said we provide specific and detailed information for County planners when they need it. State and Federal agencies use our information. Private industry, the Natural Heritage Program is responsible for doing what is called ecological ranking of species and eco-systems. There is a method to essentially identify what is of high conservation value on a global scale. And those ranks are called “g” ranks, that is global ranks one to five. One being critically imperiled, five being demonstrably secure. Again, think Golden Paintbrush and Doug Fir, as two examples of the one in five. So the natural heritage program in our state is the one that is responsible, that's responsible for setting those conservation values for those species that you find in Washington State. Conservation organizations use our information certainly, students and educators do too. The other thing that the Natural Heritage Program does and this is just a “inaudible” filling in for you we identify areas that are protected in the natural areas system of the state for long-term protection. Some of these are in your back yard. We protect natural area preserves and natural resources conservation areas, to name a few. And those are managed by the Department of Natural Resources, natural areas program, though State Park's and the Department of Fish and Wildlife manage natural area preserves. And this is where they are. We have 85 about 145,000 acres state wide. The ones that are in your backyard are Bald Hills, NAP, Kennedy Creek, as you're driving to Mason County it's on your right, primarily. Mima Mounds most people know this one, those lovely prairie mounds and then Woodard Bay and RCA, plus there is another one that is secret, I'm not gonna no. There is a tiny little one on the way to Tenino that has the best population left of Golden Paintbrush in the world so it's not one we advertise and it's not open to the public. And that's my presentation. I am open to questions if you got any.

Commissioner Kohlenberg: So, all of this discussion on species of local or state wide concern.

Pene Speaks: Yeah.

Commissioner Kohlenberg: Does that come from you guys, that particular designation?

Pene Speaks: Certainly the state wide does. Yes, and we have contributed that local, information and knowledge, which in many instances as a matter of fact when Thurston County was identifying some of those local species of concern natural heritage scientists were involved in that. We also have been engaged with Island County, King County yeah so we do add information to that.

Commissioner Kohlenberg: Okay.

Commissioner Davis: So, do you have a sense of how, there's been talk in the past of kind of intergrading the different state databases on species, your primarily plants, Fish
and Wildlife has priority habitats and species, which is wildlife and some habitat and there’s interlap and information shared and it’s a great relationship between the two programs but is there a plan in the future and do you know where it stood now to consolidate those two databases? I know that would make a lot of sense, but I know there are obstacles.

Pene Speaks: There are a few obstacles to that certainly that has been a push in state government to do more consolidation all I know is that there is natural resource reform which the legislature has been and frankly the governor has been pushing more towards, to gain some efficiency just for the purposes of today of what you’re talking about so we aren’t doing we don’t have redundant systems. In the instance of our database compared to wildlife’s database, we manage, we manage information differently.

Commissioner Davis: Right.

Pene Speaks: They have an observational database not to get to archaic about it but we “inaudible” that if you see a species, you record it that’s not what we would consider an element occurrence. If the population, if there’s a population of that species or if you’ve identified something that’s demonstrable from a life history perspective ok, this is a “inaudible” that’s being continually used then that probably is part of an element occurrence. So we have a, we’re working together to kind of try to balance those differences those differences between the kind of data that we manage. Now, one thing that has been a little bit of a problem for Washington State as a whole is our information goes into nature serve into that network so, all of the eco-systems and all of the rare plant populations for Washington State are included in what’s called nature serve which is the organization that manages that international information so if the federal highway administrations doing an I-5 upgrade from California to Washington you know it calls nature serve and says what are all of the things we need to worry about as far as species and eco-systems along that path. They get for California and for Oregon there fish and wildlife and plant information, from Washington they get plant information and not wildlife information because the information isn’t the same and it’s not used equally in their system. It’s a little bit of a concern, that’s probably more of an answer then you wanted but certainly our hope is that eventually and you know like I said we’ve been working on trying to integrate it more so that we’ve seen what’s information for our wildlife so that overall that information is more shareable and so is species better protected too. Yeah?

Commissioner Fleisher: I remember there was a talk in the last legislature about eliminating the program or eliminating funding for the program, and I was just wondering what the story was there, that is how you came out of that what the outlook is going forward for the program?

Pene Speaks: Well thank you for the segway. Right now actually I was just told yesterday that we have a year’s reprieve. Our agency has decided to pull together some funding to keep the program alive for the next fiscal year with the hope that we’ll figure out, hopefully with help how to fund the program, how to keep it functioning. This is a
really critical conservation program for our state. There isn’t anybody else that does
what we do, and information of this nature is not valuable if it’s not current. Keeping a
program that is constantly managing the data and keeping it current is incredibly
important, and if we are going to continue to be a leader as Washington has in
conservation we need to have programs like this to do the best that we can. One of the
reasons why the Natural Heritage Program was established was to be more efficient.
Ok, I want to be sure that we’re doing good conservation we want to protect the most
important thing, what’s the most important thing? How do you figure that out? First of
all you need to know what’s there, then you need to know is it ok or is it in jeopardy.
Then you need to find out ok, what’s the best that’s left, let’s make sure we protect at
least a piece of it so that we’ve got that for the future. That’s what the Natural Heritage
Program was established to do in the first place, to make us efficient so we’re not just
saying oh this looks like a good piece of land let’s protect it. Is that the best one that we
should, is that the most important one? Does that give us the most important result? So a
big point of having natural heritage programs across the county is to be sure that we’re
protecting the thing that is the most critical. So and certainly having a program like this
that is providing information for your work and, for the work of other county planners
around the state and our state is, not necessarily unique but it certainly is emphatic, it’s
the way it implements ecologic protection and environmental protection thru local
planning departments and thru local jurisdictions. So making sure the absolute best
information is out there for us to do the best job, for you to do the best job I think is
pretty critical. And like I said the Natural Heritage Program probably provides
information to more counties than to any of the other, we get inquires from consultants
for instance if you do wetland delineation in the state you have to query our database and
find out if there’s anything of natural heritage interest there for example. But still county
planning departments way exceeded anybody else that asked for our information so it’s
pretty important we have it. So, we need to be in my mind concerned and try to be
innovative on how to protect and keep this type of information available. So, that’s my
pitch. So we’ve got and frankly we have until July 1 of next year to figure out what to do
about that.

Commissioner Fleisher: How are these programs surviving in other States that are going
through the same kind of budget problems we are?

Commissioner Kohlenberg: You mean even worse?

Pene Speaks: Various thru various means, there in different places some Natural
Heritage Programs are in the university system some are in different agencies. Our State
is a little bit more unique because we do have a Fish and Wildlife agency that manages
the fish and wildlife stuff and then we have the Department of Natural Resources that
manages the plant stuff which is a little unusual. In most states that’s put together, so the
funding for instance that helps support fish and wildlife agencies that comes from the
Federal Government also that comes from ducks, “inaudible” and hunting licenses and
those kinds of things provides a little bit better support. We’re dependent on the general
fund which is tax revenue and it makes us more vulnerable. When you line up let’s see
plants and butterflies and kids health care no contests. Though, but many other states are
organized completely differently than Washington is. And some programs are free for
service to so that is there funding comes from projects that they do. Probably this last
two years about sixty percent of the Natural Heritage Program here in the State of
Washington was funded through external funding that was federal projects, local projects
and that sort of grants and contracts that we get and only about forty percent of our
budget actually came from the State. We need to be creative.

Commissioner Fleisher: Thank you.

Detailed section ending at 01:02:28

Some handouts were then passed out by Ms. Speaks in regards to the Natural Heritage
Program and it was also pointed out that they were on line as well.

Mr. Clark then introduced Doug Meyers with the People for Puget Sound who will be
discussing marine habitats and riparian areas.

Detailed section starting at 01:05:24

Doug Meyers: Hi everybody I’m Doug Meyers, and I’m the director of science for
People for Puget Sound and before that I was with the State Puget Sound Action Team.
“inaudible” with the State Department of Ecology so I’ve got a little bit of experience
with some of the fish and wildlife habitat conservation issues regarding marine shorelines
in particular that affect both the Critical Areas Ordinances and the Shoreline Master
Programs. So I have been asked to come and kind of give a little review of the science
and the importance of those marine habitats so that you have that kind of information,
available to you as you consider the CAO updates. So, I have this broken down into the
different categories, marine shorelines of statewide significance, marine shorelines of the
state and I have a few statements up there that are kind of my statements that I’m putting
forward but there’re but there a fairly informed opinion coming from lots of different
research that, I can go into specific studies if you’d like me too. But basically all marine
shorelines within Puget Sound contribute to the food web of Puget Sound through leaf
litter, insects, intertidal invertebrates, forage fish, algae and other submerged vegetation
within the photic zone. The photic zone is the part of the water that can absorb light to
the point where photosynthesis can occur on the bottom. So once you get below that
depth then plants can’t grow so that very light in shallow area is the photic zone. All
marine shorelines in Puget Sound are part of a contiguous migratory corridor for multiple
species of Pacific salmonids and I’ll go into both of these concepts a little deeper as we
get into the, the best of it. So this is a flow chart if you will of things called near shore
valued ecological components. This is from a Core of Engineers State of Washington
study looking at the interconnection between those habitats and species that are important
to people in Puget Sound. Clearly things like Orca’s, Great Blue Heron, Pacific Salmon,
Olympia Oysters, Dungeness Crabs we can understand without a whole lot of debate that
those are important things that people enjoy out of Puget Sound and the little flow chart
arrows are to be able to really show you how the connection between different near shore
land forms affects those species. And it might be in, and nesting sites might be in food, it
might be in spawning or feeding sub straights that are required for those things so this is
obviously not a comprehensive food web of Puget Sound there are thousands of species
and way too many arrows for us to look at tonight but for this simplifies drawing it’s
really important to show some of the central species like Pacific Salmon and forage fish
in particular have direct connections to marine near shore environments and shorelines
and I think that would be very informative to keep that in mind that that those are both
very important in transferring energy from the marine shorelines to their bodies and then
transferring that energy to the bodies of whoever is eating them. So the next area of
marine habitat is marine areas supporting kelp and eelgrass beds. There is some eelgrass
mostly in the eastern part of the county in the Nisqually Reach area both native and
introduced Japanese eelgrass support abundant marine life within the bed and contribute
organic matter to deeper parts of the Sound. So I have had the privilege to be able to take
a little remote operated vehicle down to four or five hundred feet below Puget Sound and
see what looks like a snow storm down there that’s happening all the time. That is
mostly the dead and dying pieces of the eelgrass blades that are falling down as they’re
getting swept off the lighted shelf “inaudible” down into the deeper waters to create kind
of a nutrient rich food source for everything down there. In addition to that there are
many kelp species that occur in the upper sub tidal so just below where the low tide is.
We often don’t get to see these kelps very often because you have to be at a minus tide to
be able to see them. And we are mostly familiar with the bull kelp, which is the big long
one that has the “inaudible” that are floating at the surface which are great to inventory
cause you can fly over with an airplane and see them but these other kelps don’t ever
reach the surface so they’re not very well inventoried so we don’t have a very good feel
for where those are. You can assume that most of the shorelines have some non canopy
forming kelp within the photic zone but below the dept that you’re likely to see them on
the surface. And the big concern from any development that occurs along the shoreline is
nutrients specifically nitrogen that run into Puget Sound will create excessive
phytoplankton growth and that makes the water green and so therefore it dissipates the
light that would be reaching down to those kelp beds. So, kelps are much more sensitive
to that than eelgrass because eelgrass is generally found in a shallower area. One piece of
information that’s come to light from an excessive study at South Puget Sound is because
of our extreme tide range it can be up to twenty feet in some places, the high tide makes it
to deep for eelgrass to get light at high tide and the low tide is so low that eelgrass would
dry out at, at low tide. So therefore, it’s the lead that it was never extensive eelgrass beds
west of Nisqually in South Puget Sound. So, you don’t have to try and go restore them
they were never there. This is what one looks like and it’s a tiny “inaudible” of all kinds
of vegetation, the eelgrass blades are a pretty “inaudible” structure in the water they are
positively blanch they have all kinds of things growing on them they have a root mat that
grows through rye zones across the sediment and then often times they will leave brown
patches that you see in there that are the non canopy forming kelps. They’ll often get
stuck within the eelgrass blades themselves. So those two things very important within
the marine shorelines for generating the food that a lot of things are eating, creating the
structure that a lot of things are hiding in and then exporting those nutrients out to deeper
waters. Herring spawning, there are several shorelines in Pierce and Thurston Counties
with major holding areas for herring off shore but we don’t have a lot of information on
herring spawning on Thurston County beaches not to say that their not there if they
would be there this is where the herring spawning maps are from Department of Fish and Wildlife’s surveys of herring spawning. It would be found on something like this in the corner of the “inaudible” a very common marsh plant that’s usually at a depth where eelgrass if it’s not spawning on eelgrass it will spawn on “inaudible”. So it’s very possible we have some shallow coves that might have this or some eelgrass you know they might be suitable for herring spawning again, there’s not been documents, this is coming, going back to it “inaudible” about the Department of Fish and Wildlife having observational databases it’s not necessarily “inaudible” it’s a really important part, population it’s just presence are absent, they were found there, they were not found there. So you have to be careful in interpreting that data both directions if something’s not found there when it’s surveyed doesn’t mean it’s not found there. Does that make sense?

Commissioner Spaulding: Right.

Doug Meyers: Intertidal areas support surf smelt and sand lance spawning. So Thurston County shorelines are highly documented for both Surf Smelt and Pacific Sand Lance spawning. And this is where I’ll make that “inaudible” again. Even thought they have not been found, this means that those surveys were not done on a day when eggs were there. Not to say that all spawning beaches will be used at all times. There is a lot of information not known about sand lance and surf smelt biology including whether or not they have a homing instinct to certain beaches or whether they’re using springs and seeps to smell certain aspects of certain beaches because there’s much sub straight out there and the pebble and the sand grades sizes that are appropriate for both surf smelt and sand lance where eggs have not been found. And so that makes it kind of difficult, you got a lot of potential spawning habitat for these species but this is what the map spawning habitat looks like. This is about thirty years of data collection from the Department of Fish and Wildlife and you have to take these maps with a little bit of a grain of sand because the actual survey lengths of the beaches are about a hundred meters, and so when you show the data at this scale and you have lots of you know hundred meter dots that are on a small map it’s gonna look like a continuous coverage but it’s not necessarily so. So if you actually printed the maps at the scale in which the surveys were done you would see dots pretty far away from each other. But you can get the general idea that both the sand lance here on the right has some spotty distribution on many of the Thurston County beaches and much more surf smelt spawning habitat very continuous throughout much of the Thurston County shorelines even in Budd Inlet. Salmonid habitat, so, you know I struggled with exactly how to show you this because it’s very hard to find somebody who’s got good pictures of juvenile salmon migrating along the shoreline, we know they’re there we’ve caught them in lots of different ways. This is a composite map put together of several years of coded wire tiding data so coded tides are the little things that are inserted into the salmon’s nose at hatcheries so that you know the origin of the fish, which hatchery it came from. And so as people are out there doing there fish seining studies they collect fish then they run the little, there’s a little, it’s almost like your grocery store scanner.

Commissioner Spaulding: Scanner.
Doug Meyers: “inaudible” you can read the tag and it can record the location of the hatchery that this fish came from. Now there’s a huge caveat that I like to put out there is that we are assuming that wild fish and hatchery fish behave similarly.

Commissioner Kohlenberg: Yeah.

Doug Meyers: Similarly, there’s no way we’ll ever know for sure because the wild fish are about this big and there’s no way to get a coded wire tag in the middle it’d be bigger than the fish itself. But, the information we got from the coded wire tags from hatchery fish was quit informative that these pie slices basically were shown the relative proportion of fish coming from different parts of the Sound and then being found in other parts of the Sound. So for example the yellow, Central and South Puget Sound area that were currently in has it’s fish found in the near shores of all the other segments and you can see the pie slices in the south, southern and central parts of the Sounds, have pie slices from each of the other. So some of the, the size and the pie source is a relative number of fish that were caught from that part of the Sound, so the one that’s impressive to me is to see the Northern Strait of Juan De Fuca fish are actually coming down into central and south Puget sound and using those habitats for their rearing habitat. So are small numbers of fish from the San Juan Islands and the Nook Sack. This is what I’d like to summarize this is your fish are my fish are his fish are die fish. There, there all swimming together “inaudible” life’s history patterns and sorry so you cannot just cut it. This kind of goes back to my first statement about all marine shorelines in Puget Sound being continuous migratory corridor for fish now whether or not a listed Puget Sound Chinook salmon is among those fish requires a level of additional analysis that probably doesn’t exist anywhere because if you were to catch that many fish that were endangered they would be extinct by the time you were finished counting them. So you have to be careful in looking at this or somewhere with fair certainty that were the “inaudible” the distance fish are exhibiting this behavior as well and therefore all these shorelines are pretty critical habitat for Puget Sound. You should look into the critical habitat designation that was put out by NOAH for Puget Sound Chinook and Hood Canal Summer Chum listed all the shorelines of Puget Sound.

Scott Clark: So you mention they are similar, the hatchery and wild. What are some of the differences though?

Doug Meyers: So the hatchery are generally held in their holding ponds until they are a certain size and then released where ease the wild fish would begin migrating as soon as they hatch out and there would be a much larger size range of fish with the wild fish so depending on how long they stay in the river, they will come out as really, really tiny or they will come out as large as or larger than hatchery fish. So when looking at one specific size range of fish in these coded wire tag studies that we find to be fairly mobile but there’s also been larger even yearling size steelhead and other fish that were tagged. There exhibiting the same behavior swimming across large parts of Puget Sound, even going in and out of various rivers and coming back out after spending a few days there. So we think among some “inaudible” this is a fairly typical behavior. The bedtime story
where told about fish you know swimming out into the middle of the ocean and coming back to their exact same stream is a little bit of a signification of what they’re actually doing.

Scott Clark: One of the concerns I heard about a couple of years ago from a fisheries friend of mine was that the hatchery fish were in fact staying in the Sound longer, and then praying on the wild fish as they were trying to migrate out.

Doug Meyers: That could be. Yes, it’s part of the hatchery reform document that the co-managers put out is to take a look at things like release timing and things like that to lessen that impact cause certainly if you release a million big Coho on Tuesday and there’s ten thousand small juvenile Chinook wild in the same river, probably not going to make it out very easily. So yeah the survival of a juvenile listed fish is a big concern and lots of different things both from the habitat perspective and from hatchery management are all interacting here so it’s quite a complex story. When you do have these multiple interacting things and I’ll get to that in the very end of my presentation we have cumulative impacts, folks will generally try to portray a precautionary approach. That for any one of the impacts you may have you need to be aware of the other impacts that are acting in concert with it and be precautionary. I’ll get to some of those recommendations toward the end.

Commissioner Davis: But GMA requires us to offer special protection of anadromous fish so there’s not a distinction for us or between wild or not.

Scott Clark: Well and I guess the concern is that statistically you really can’t tell I think if your protecting the wild stock too, they’d really like too.

Doug Meyers: Yeah, it’s a big challenge but a recovery industry. Shellfish beds sustaining commercial and recreational shellfish harvest, so we’ve quite a few shellfish beds active in Thurston County and there are a number of things I’d like to say about that. One, is a vital shellfish industry is extremely important for my organization as a constituency in politics including water and if you have an industry that can make money off of clean water, it’s way better than having one that makes money off of dirty water. So that being said there is a number of things that happen in the CAO implementation that can affect clean water for recreational shellfish and commercial shellfish harvest. And I look at this particular example from the Henderson Inlet Watershed the growth management itself upon its passage in 1990 created a scurry of activity for folks to clear their land just in case they couldn’t clear their land, so they did. So you can see the difference on top and back and forth between the 1991 and 1995 image even though there is no real threat to land use in that area a lot of people cleared there land anyway and shortly after that the Henderson Inlet water quality went below standards for shellfish harvesting or it was closed. And it has been struggling to be reopened. I think parts of it are now. Marine riparian areas I love, this picture I can’t even remember where I found it but it’s a nice economy of where you have it, where you don’t. And this plays right into my example of cumulative impacts and if there was just a forest that was removed that would be one thing but you also have a bulkhead and you have a impervious surfaces and
you have the removal of the native vegetation and you have septic tanks and you have all kinds of things happening on the beach. So marine riparian areas are extremely important and there is lots of different functions that they have for protecting water quality. The Department, the Center I mentioned earlier I had the pictures of the critters and all the arrows took a look at various stressors and it’s a Puget Sound near shore restoration project and it identifies these particulars, stressors around shoreline armoring which is the main concern here. Interrupting the natural sediment flow of the shoreline, mostly from areas where the lateral drift, the movement of sands goes from one place to the other, it also interrupts it from onshore to offshore. So the natural sliding and erosion that would happen “inaudible” actually increases with bulkheads because you reflect the energy of the wave downward into the beach. Interrupts that natural drainage patterns most of our shorelines bleed freshwater constantly cause of the different layers of clay and sand so whenever that’s interrupted by a concrete wall it generally creates lateral flow problems that often damage the bulkhead over time. Loss of riparian vegetation is obvious because in many cases the bulkheads being built from land so everything is moved down to the shore line where they want to build it. Then we get the cumulative impacts with “inaudible” working together. So what are some of the functions? Remember back to my first slide about shorelines providing things like insects and “inaudible”. So this petri dish is the stomach contents of one juvenile salmonid and its chalk full of “inaudible” and aquatic invertebrates that fall off of trees. So we like to joke around in the Puget Sound Near shore program about, do salmon grow on trees and they actually kind of do. Hilary Culverwell and Jim Brennan were the co-authors of this study that is sited very frequently in best available science literature for marine riparian areas as to what functions they provide for shoreline. I actually have a best available science document I am going to hand you guys at the end just for some light reading. Department of Natural Resources looked at all of the marine shorelines in the state, it was in a helicopter and created kind of a standard mapping program that’s being used in British Columbia and Alaska and a lot of other places and it gives us an idea of modification things like bulk head sea “inaudible” that have created these disruptions to the natural processes and this is what that distribution looks like. So anything with a black shoreline is greater than 75% modified. That’s pretty severe when you consider all of the functions that would go along with an “inaudible” shoreline. You can only see a few places that are poking out in Western Thurston County and Henderson Inlet, a few other places that scale. So there is a lot of concern that we don’t have a lot of shoreline that’s been unmodified that’s left. So that was 2001 this is the brand spanking new stuff coming out with “inaudible” for the Puget Sound Near shore “inaudible” restoration program. This is putting all of the different impacts that can happen on Puget Sound shorelines in the same scale no matter where you are, because what we did for many years is we would say I’m going to inventory and assess Thurston County and so I’m going to come up with a scale of best to worst within Thurston County and then you looked at oh it’s adjacent to Mason County and Pierce County and they used a different scale of best to worst based on what they had. And so there was all this difficulty in comparing the methods between areas. So what the Puget Sound Near shore Program did was put together a common vocabulary and a common, I would say metric for measuring cumulative impacts of degradation to shorelines. And the statement I have here is kind of showing that within Thurston County shorelines only the portions within Nisqually
Reach which I am happy to announce will be within an aquatic reserve as of Friday and 
Henderson Inlet and portions of Eld Inlet are currently in the, are fully functional which 
would be kind of the yellow down to nil range. Very few have process disrupting 
interruptions and the update to that would be that all the red that is currently around the 
Nisqually Delta that’s been gone since the restoration project so that data comes from pre 
restoration. There is another nice little red place around the delta downtown Olympia 
that I would love to put a whole in so we’ll get to that some other day. So buffers, I’ve 
been asked to talk about buffers and buffers are like you know like a hammer that’s if it’s 
the only tool you have then everything looks like a nail so I don’t like the use of buffers 
as a standard width. I think that it is a very blunt instrument for shoreline management I 
would not recommend it for urban shorelines like Thurston County where there is large 
variation in the level of development and the level of natural function as we just saw from 
the previous slide. There is best available science literature all over the place on buffers 
for marine shorelines, Jennifer I know you are extremely familiar with some of those. 
And what they basically do is they look at ranges of buffer widths based on water quality, 
large woody debris, shade, a number of different functions that your trying to protect for 
equality and to provide those ranges that account for differences in slope, soils and 
amount of native vegetation. So if you have clay soils that run off very quickly than 
sandy soils you have to have a longer buffer for the vegetation to have the contact time 
“inaudible”. So whenever you have a 50, 100, 125, 250 “inaudible” standard buffer 
width and you try to apply that to all shorelines of all different kinds of soil types 
“inaudible” it's no longer a people studio. So we’re recommending to take a little more 
“inaudible” approach and take a look at that kind of information. My recommendation of 
buffer applications; choose different buffer lengths to protect existing functions and 
conform to shoreline environment designations which has already been done with the 
Shoreline Master Program being updated and will allow you to see what’s the current 
level of development. There is a number of different ways to apply different shoreline 
widths at different levels of development and shoreline management is pretty much 
setting this stage for development and redevelopment within existing developed areas and 
protection of existing undeveloped areas.

Commissioner Davis: So do you think the science is there right now to reach specific 
enough to have the county without extending a whole lot of money do a non-standard 
buffer?

Doug Meyers: Yes I think it is. But before I answer that question to definitively I want 
to get to my next bullet which all of the government should do a risk analysis about 
setting buffer widths because there’s is as much as a social science to this as there is 
physical science. There are two considerations because each of the best available science 
documents will say a buffer width of this x whatever it is will protect 80% or 90% of the 
function that you’re interested in whether it be water quality, whether it be “inaudible”. 
So the risk is from the physical science that 20 or 10 percent of those functions are not 
protected. So we are a state that has very active native American tribes who are 
protective of the natural resources. We have an active shellfish industry, we have an 
active environmental collation of organizations like mine who may decide that, that risk 
is too high for our constituencies and decide to appeal or even sue our local government
for taking a risk of letting certain functions go on uncovered. We have the opposite risk of a small but vocal shoreline property owners group who will no doubt show up at great numbers to a hearing and claim that a 25 foot buffer is taking their land. So until the jurisdiction does a little bit social science about who is willing to weigh in on the buffer regulations and get some information and intelligence on that just setting buffers on best available science from the physical science standpoint I think would be foolish. With that being said there are folks who have gone before you and have set buffers and have had them appealed and have had court cases come down on them. It is instructive to look at those, not say that you need to do exactly what that jurisdiction did but it is instructed.

A discussion ensued in regards to buffers within shorelines.

Staff then at decided to discuss frequently flooded areas. The work session started at 01:45:00. Draft Chapter 24.20. On the table the planning commission would like to see the legend on every page. Thurston County has to provide an answer to the state by January 22, 2012 whether we will opt in to the Ruckelshaus process which is a voluntary program in which a group of stakeholders would be the ones that determine how agricultural lands are managed regarding critical areas or not and the County would draft our own process on what critical areas would be on agricultural lands.

Certain language was discussed to ensure it matched restrictions/requirements of other sections of the CAO. A section to add that will be explored is replacement of bridges. Staff will also be taking a look at special circumstances and certain situations process wise.

9. 8:42 P.M. WORKSESSION: Cottage Housing – Lacey & Rural Thurston County
Staff: Tony Kantas

Mr. Kantas gave a brief overview of the previous process that had taken place for the draft cottage housing ordinance. The Planning Commission has held four previous briefings regarding a Cottage Housing Ordinance, which would amend Title 20, 21, 22 and 23. To date, the Planning Commission was waiting to take action in scheduling a public hearing in making a recommendation to the Board of County Commissioners (BOCC) until the City of Tumwater had gone through the entire public process in adopting the Thurston County Green Development Stakeholders version of the drafted cottage regulations, but it was determined at the time of adoption, by the Tumwater Council to wait until the City had adopted residential design standards.

The BOCC received a letter from the City of Tumwater, asking delay in adopting a cottage housing ordinance in the Tumwater Urban Growth Area until the City has adopted residential design standards, which may not occur until sometime next year.

The City of Olympia has indicated that the City is not interested in amending the existing cottage code for the Olympia Urban Growth Area (TCC 23.04.060(8)). Staff is prepared
to move forward with the Planning Commission in making a recommendation for cottage
development in the Lacey and Grand Mound Urban Growth Areas. Currently, the Lacey
and Grand Mound Urban Growth Areas do not have any standards or guidelines for a
cottage housing development. Some examples of cottage housing can be found at
http://www.pocket-neighborhoods.net gives good insight to cottage housing.

Commissioner Jackson asked a question of the layout of the type of dwelling unit that
will be built including square footage. A discussion ensued. To clarify the maximum
square footage of a unit would be 1200 ft.² with an additional 500 ft.² mother in law unit.

MOTION: Commissioner Spaulding moved to set a public hearing on Cottage
Housing October 19, 2011. Commissioner Davis seconded. Motion carried. Two
opposed.

Another work session was suggested prior to the public hearing. Specific language was
then discussed including the maximum size spelled out within the draft ordinance. Also,
how these requirements coincide with the CAO.

MOTION: Commissioner Fleisher moved to change the maximum square footage of
the cottage unit floor area from 1,200 square feet to 900 square feet maximum.
Commissioner Spaulding seconded. Motion was then withdrawn by Commissioner
Fleisher.

Further discussion ensued in regards to the square footage that should be allowed.

MOTION: Commissioner Fleisher moved to change the wording in the draft
ordinance to say the maximum allowed gross floor area is 900 square feet per
dwelling floor area does not include covered porches, or garages. Commissioner
Earle seconded. Motion Carried. One person opposed.

Again further discussion ensued with language changes on page 6 and clarification on
page 7. The commission also contemplated taking out assessor structures especially the
sentence stating “The maximum height for all accessory structures is 18 feet”. The
Thurston County Code was also read that defined an accessory structure. It was then
decided that further discussion was needed at the next planning commission meeting and
staff would be doing further research along the lines of the planning commissions
questions.

10. 9:25 P.M. CALENDAR

September 14, 2011 – Commissioners Fleisher and Earle will not be in attendance.
September 21, 2011 – Commissioner Earle will not be in attendance.
11. **9:27 PM ADJOURN**

With there being no further business, Commissioner Nelson adjourned the meeting at 9:27 p.m.

Scott Nelson, Commissioner

Prepared by Carrie Toebbe, Recording Secretary

The above transcript is a verbatim transcript with extraneous words removed such as um, uh, etc.