

Slide	Text
1	<p>Welcome. Thanks for being here together to learn about the development of the Chehalis Basin Strategy. A suite of actions are being evaluated to help address two major challenges in the Chehalis River Basin – extreme flooding and the declining health of the river and its aquatic species. The good news is, basin communities and the state are in a position to do something about it.</p> <p>Today I'll explain what the strategy is, why it was developed, and how you can contribute. We also want to hear from you – about your experiences in the Basin, what's missing from the strategy, and what excites you about the strategy.</p> <p>Image location: Chehalis South of Hwy. 6</p>
2	<p>The Chehalis Basin, which covers areas of Grays Harbor, Thurston, and Lewis Counties, is the second largest river basin in Washington.</p> <p><i>[Optional description, depending on the audience and the amount of context needed.]</i> <i>A river basin is all of the land that water flows across on its way to a river, including streams and tributaries. The Chehalis river basin starts at the headwaters south of Pe Ell and goes all the way to Aberdeen where the Chehalis River empties into Grays Harbor. The Newaukum, Skookumchuck, Satsop, Wynoochee, and many other rivers are part of the Chehalis Basin.</i></p> <p>A river basin crosses towns and county lines – so solutions need to be comprehensive, and at a big, basin-wide scale.</p> <p>Image location: Chehalis River, Ceres Hill Rd.</p>
3	<p>As you know, the Chehalis Basin is a vibrant region, with plentiful opportunity and a bright future. There are long-time residents with deep roots and rich history, and people moving in bringing new businesses, new families, and new energy.</p>
4	<p>But the Basin has suffered from devastating flooding for decades, dealing a blow to productivity. One local business owner said, <i>“We take one step forward, a major flood hits and its two steps back.”</i> (Ron Sturza, Chehalis business owner)</p> <p>Image Location: Boistfort Valley</p>
5	<p>And five of the largest floods in the basin's history have occurred in the last 30 years. Summers are becoming drier as well. These trends are expected to continue and even worsen in the future. If we don't do anything to address these problems, maintaining the status quo, we could be looking at an estimated \$3.5 billion in damages over the next 100 years.</p> <p>[1986, 1990, 1996, 2007, 2009]</p>
6	<p>Everyone in this basin has felt the impacts of extreme flooding in one way or another— from families, to natural resources, to the regional economy. As a Boistfort Valley Farmer said, <i>“Flooding is a weight on the shoulders of the community.”</i></p> <p>[Dave Fenn, Boistfort Valley Farmer]</p>
7	<p>This is a diverse, abundant basin for plants and animals, too. Aquatic species like salmon, frogs and other water creatures depend on the rivers and tributaries and “riparian habitat” in the Chehalis Basin for egg laying, rearing and protecting juveniles so they can grow and maintain healthy populations.</p> <p><i>[Optional context]</i></p>

	<p><i>You'll hear a lot of people use the term "riparian habitat" or "riparian zone" when talking about river health and restoration. This is the technical term for the area where the land and river meet.</i></p> <p>Image location: Chehalis River Surge Plain</p>
8	<p>Many different species of fish are found in the basin including steelhead and several types of salmon including Chinook, coho, and chum. The rivers and streams in the basin are also home to many amphibians like frogs and salamanders. In fact, the Chehalis Basin is the most diverse basin in Washington for amphibians.</p> <p>Image location: Black River Refuge</p>
9	<p>However, the once abundant salmon populations on the Chehalis are at 15 to 25% of their historic levels. Though populations have been strong, predictions show populations will continue to decline if we don't do anything.</p> <p>The Chehalis Basin is the only river basin in Washington that does not have any federally listed endangered species. The reality is, if something isn't done and the situation continues to decline, we could see several species placed on the federal endangered species list, which could severely limit the options in the basin for people. "Listing" is about avoiding extinction for species, but can also mean difficult restrictions on private and public land.</p>
10	<p>A strategy is being developed– and it's a big one. The state and local leaders are working to develop a strategy that will address both flood damage reduction and improve river habitat. This is a basin-wide strategy that includes near-term and long-term actions, as well as small and large scale projects. You'll see the scale we're talking about when I talk more about the actions being considered.</p> <p>But I'm here talking to you today, and lots of other folks, so we can refine the strategy together. The Chehalis Basin Strategy brings together a growing knowledge base with local participation and state government support. And to be clear – everything is still in the works.</p> <p>Image location: Newaukum River</p>
11	<p>You may have noticed some local projects happening around the basin right now. In fact, there's currently about \$23 million in state funding for local projects to reduce flood damage and restore habitat, including levees, floodwalls, restoration, and reconnection of flood plains. If you want to know more about these specific projects, we can talk after the presentation.</p> <p>But this first set of actions won't be enough – if we address these problems at a scale called for by in the strategy, we have a chance to turn things around by reducing flood damage and improving habitat.</p>
12	<p>Right now, the Department of Ecology is leading an environmental review called a "programmatic environmental impact statement." You'll hear it referred to as an EIS. Ecology is looking at different combinations of recommended actions and evaluating their potential effects on people and the environment – both positive and negative.</p>

	At the end of the year, after hearing from people in the basin and reviewing the EIS results, the Governor will make a recommendation on the preferred combination of actions.
13	<p>There have been decades of well-intended efforts to improve conditions in the Basin, but they were piecemeal, and there hasn't been agreement about what to do. The Chehalis Basin Strategy is different. The actions being considered are on a large scale - large enough to turn things around and ensure that all can thrive and prosper. Input from people living and working in the basin is critical to developing a successful strategy. It is truly an ambitious effort, beyond what has ever been done here in this basin before, and everyone has a role to play.</p> <p>The Chehalis Basin Strategy is based upon working together, and establishing common ground. Your input and perspectives are essential to the process. That's why we're here today.</p>
14	<p>I'm going to go over all of the actions being considered now. I want to emphasize that nothing is decided at this point – these are just the actions being considered. Later in this presentation, we want to talk more with you about what you think about the actions being considered. As I go through the next few slides, think about these questions:</p> <ul style="list-style-type: none"> • What excites you about this strategy? • Does this strategy address the challenges you've experienced? • What concerns you about this strategy? • What would make this strategy great?
15	<p>The strategy includes two overarching types of actions: flood damage reduction and habitat restoration, and there are many actions within each of these types. We'll go into a bit of detail about each of the actions being considered.</p> <p>Image location: Chehalis River, I-5</p>
16	<p>"Flood damage reduction" actions are projects that aim to do just that – help lessen the devastating damage caused by extreme flooding.</p> <p>In the EIS, both "large-scale" and "local-scale" actions are being analyzed. The "large-scale" actions are being evaluated because the problem with flooding is big, and actions need to match the scale of the issue.</p> <p>Image location: Chehalis River, I-5</p>
17	<p>First, a flood retention facility – or a dam. It would be located on the main stem of the Chehalis River about one mile south of Pe Ell. Two types of facilities are being considered – one with a permanent reservoir, and one without.</p> <p>A dam without a permanent reservoir would hold back water temporarily during major flood events only, and the river would flow normally during regular conditions or smaller flood events.</p> <p>A dam with a permanent reservoir would hold back water continuously instead of only during major flood events. Water from the reservoir would be released to help control river flows, and other factors like temperature and erosion downstream.</p>

	Both flood retention options would include fish passage. It's also important to note that initial analysis shows that this type of dam would protect about 55% of the structures flooded in 2007. It's not a "one-stop" solution, but could help reduce flood damage.
18	<p>Other "large-scale" actions being considered include what's called the "I-5 Projects," which would be a series of levees and floodwalls to help prevent flooding and closure of I-5 in the Chehalis and Centralia areas.</p> <p>Additionally, several large-scale levees are being evaluated. Levees can help reduce risk and damage during major flooding. The levees being considered would protect key areas, including a levee between Hoquaim and Aberdeen. It would provide coastal flood protection for the City of Aberdeen and the lowlands between Aberdeen and Hoquaim. Image location: Chehalis River, I-5</p>
19	<p>The final large-scale action is what's called "restorative flood protection." This essentially means restoring the Chehalis River and watershed to natural, functioning conditions. Floods are a natural part of the way a river works. Restoring river functions helps to store and slow the flow of water within the Chehalis Basin, in turn reducing downstream flooding. This can be done by raising areas of the riverbed, replanting native trees and vegetation that help slow down river flow, and building back up channels into what has historically flooded. Image location: Chehalis River, Black River</p>
20	<p>In addition to the large-scale actions, various "local-scale" actions are being considered. These are smaller-scale actions that are effective in reducing flood damage for individuals and local areas. These types of actions include:</p> <p>Floodproofing buildings in floodplains, or even buying out frequently flooded properties from willing landowners. You can see an example here of a home that was raised to help reduce future flood damage. You can raise buildings, or build flood walls around them.</p> <p>Another "local-scale" action is building farm pads. They are straightforward and effective. Farm pads are raised areas that are a safe place for farm animals and equipment during floods.</p> <p>We're also looking at "local projects" which would protect key pieces of infrastructure from future flooding, things like wastewater treatment plants and protection of roads.</p>
21	<p>The final "local-scale" actions recommended in the strategy are improving land use management and flood warning systems.</p> <p>With land use management, the state and local governments can ensure when new development occurs, it's not creating more damage and not being located in frequently flooding areas.</p> <p>The basin's flood warning system could be improved by adding more river monitoring points and doing more flood modeling to help give even more detailed information, delivered to people quicker.</p>

	<p>It's important to remember that any actions, or combination of different actions, to reduce flood damage would be paired with restoration activities. We'll talk about those now.</p>
22	<p>The goal of the strategy is to restore more than 100 miles of riverside habitat with several different restoration types that I'll describe shortly. 100 miles – that's a significant amount of restoration and can go a long way to improve habitat conditions for salmon and other animals that rely on a healthy river system. Like there are large-scale actions for flood damage reduction, we need large-scale, basin-wide approach to restoration.</p> <p>Restoration helps with flood damage reduction, too. Actions like planting native plants on riverside land and placing large wood in the stream and along the banks can restore riverside land, help slow and absorb flood waters, and reduce erosion.</p> <p>Image location: Newaukum River</p>
23	<p>The actions being considered and evaluated, include...</p> <p>Restoring river banks – also called river habitat or “riparian habitat” – can involve planting native plants that were once along the river and grading areas to restore natural topography. It can also include things like installing temporary or permanent fences to block livestock, people, or equipment, allowing for improved growth of new plants, or natural, “passive” restoration.</p> <p>Image location: background: Centralia, foreground: Skagit R</p>
24	<p>And restoring river banks, and reducing bank erosion. Reducing bank erosion not only helps aquatic species, but can reduce loss of land to the river. You can stabilize river banks by planting specific trees and vegetation, grading river banks, and adding large wood that keeps the bank strong, and reduces the amount of soil the river pulls away.</p> <p>Image location: Bank: Matchett Site, near Ceres Hill Rd.; Right: Independence Rd, Main stem</p>
25	<p>Does anyone fish? Think about where you try and cast to find that best fish – around snags and logs, right? Adding wood and things like large boulders in key areas can help slow down river flows, while also providing places to hide, eat, and lay eggs for river animals.</p> <p>Image location: Whatcom County</p>
26	<p>Salmon and other river species are often blocked from moving along the river by things like culverts and other manmade structures. If you remove some of these that aren't needed, it can greatly improve creatures' ability to move throughout the river system – to eat, mate, and lay eggs.</p> <p>Image location: Bray</p>
27	<p>“Reconnecting the floodplain” essentially means putting back together parts of the naturally flooded areas that have been disconnected over time. This is similar to the “restorative flood protection” option, but could be done on a smaller scale at different locations throughout the basin. This can slow down river flows, improve water temperatures, and improve species abilities to move throughout the river.</p> <p>Image location: Black River</p>
28	<p>I know there have been hopes for change in the past, for action and nothing has happened. This has left many disappointed. But, as part of every EIS, a “no action”</p>

	<p>alternative is always reviewed. There is currently funding from the state legislature through June 2017 to complete this EIS and implement some projects, as I mentioned before. The “no action” alternative analyzed in the EIS assumes that this funding would not be maintained – so no additional funds for flood damage reduction or habitat restoration for the basin past June 2017.</p> <p>Climate is changing -- Extreme winter flooding and drier summers are happening more frequently and with increased intensity. There is a need to act now to adapt to this new reality. As I mentioned before, if we don’t do anything to address these problems, we could be looking at an estimated \$3.5 billion in damages over the next 100 years.</p> <p>And there is momentum right now with the Strategy to take action.</p>
29	<p>Which is why 2016 is a critical year for the future of the Chehalis Basin. This spring, many people are out talking to folks like you about the strategy, learning about your experiences, and understanding how to make the strategy work for the Basin. The Department of Ecology, with a technical team, continues to develop the programmatic EIS. We want to be sure we’ve considered new technical information and learn from our local knowledge and experience. The draft version of the EIS will be released in the fall, and your comments are important to the process. We’ll continue outreach in the fall to talk about the EIS findings and progress.</p> <p>The Governor and legislature will make a recommendation on which combination of actions to move forward with by the end of the year, using the evaluation and technical analysis from the EIS and the input you provide. The conversations we’ve had today, and future conversations, will help leaders decide what actions get funded and move forward beyond 2016. The final EIS will be released in spring 2017, which may include what’s call a “preferred alternative” – it will be a combination of actions, or even the “no action” alternative, I described today.</p> <p>What does the collection of these actions accomplish? Nothing will stop flood damage or habitat destruction completely, but a combination of actions being considered can make a huge improvement to the current status quo.</p> <p>And we can’t lose sight of the purpose of this ambitious strategy and what it will take to address the challenges with flooding and habitat destruction. We want to build common ground moving forward. Built on a strong scientific base, and supported by state government, the ideas in the strategy will be made even stronger with local experience and expertise. Only together, can we realize the benefit of flood damage reduction together with improving river habitat. We have a unique opportunity to move forward with a strategy that will benefit both people and the watershed for generations to come.</p>
30	<p>The strategy will only make sense and succeed with the involvement of people who live and work in the Basin. As you can see – a lot of the actions being considered would need to happen on individual homes and land. The state is committed to engaging local folks as the strategy is further developed. Before the governor makes any recommendations on a final combination of actions, the actions need to make sense to those who are affected by them. That’s why we’re here together, to talk with you.</p>

	<p>So now that you've heard about the actions being considered, let's go back to those questions I asked you to think about....</p> <ul style="list-style-type: none">• What excites you about this strategy?• Does this strategy address your challenges?• What concerns you about this strategy?• What would make this strategy great? <p><i>[Group discussion with guiding questions on screen as a reminder]</i></p>
31	Here's a list of the actions being considered that I talked about earlier.
32	Thanks so much for listening and sharing with me today. Feel free to get in touch if you have more questions or would like to schedule a presentation with a different group. I appreciate you taking the time to talk and learn. Image location: Chehalis River, I-5