



Stakeholder Advisory Committee

Thurston Regional Planning Council

2424 Heritage Ct. SW, Olympia, WA 98502

Meeting 3 — September 22, 2016

SUMMARY NOTES

Meeting Facilitator: Paul Brewster, TRPC

Presenters: Paul Brewster, Mike Burnham, Katrina Van Every

In Attendance:

Name	Organization
Amy Tousley	Puget Sound Energy
Art Starry	TC Public Health
Barb Scavezze	Resident
Bill Paulen	Resident
Candace Penn	Squaxin Island Tribe
Chris Hawkins	TC Public Health
Cynthia Pratt	City of Lacey
Dan Smith	City of Tumwater
Jeanne Kinney	TC Public Works
Rich Hoey	City of Olympia
Sandra Romero	Thurston County
Scott Morgan	The Evergreen State College
Mark Maurer	TC Water Resources

Greeting and Introduction

Paul Brewster acted as the facilitator for this meeting. After introductions, Brewster passed the time over to Katrina Van Every to review the Revised Project Vision, Guiding Principles & Goals document.

Review: Revised Project Vision, Guiding Principles & Goals Document

Van Every gave a brief review of the changes made to the Project Vision, Guiding Principles & Goals document. Taking the feedback received at Meeting 2, the proposed guiding principles document was simplified and clarified. One additional guiding principle was created by pulling out the second half of the Vision Statement. The group did not express any concerns with the document. Van Every invited the group members to continue commenting on the document in the future. As the research and risk assessments clarify the climate change impacts, goals and priorities may change or new ones be revealed that aren't captured in the current iteration.

Presentation: Draft Vulnerability Assessment Findings

Burnham presented a review of the draft vulnerability assessment. Although a copy of the entire draft was not printed off for the group, it is available online on the project website. A copy of the Executive Summary from the Assessment was provided.

Burnham touched on the key impacts that are anticipated with climate change, including changes in air temperature, air quality, precipitation, snowfall and snowpack, streamflow, groundwater quality and quantity, sea-level rise, and ocean acidification and pollution. Burnham also provided an overview of how these key impacts will affect farms and ranches, forests and prairies, the wildfire season, flooding and landslides, and health and human welfare.

A brief discussion ensued, generally covering the following:

- Vulnerable facilities also include electrical infrastructure – there is a substation in downtown Olympia that would be impacted should changes in sea level and elevation (due to subsidence) occur
- What constitutes the Puget Sound region? Does it include Oregon? The Puget Sound region includes all watersheds that drain into Puget Sound. The determining factor is the watershed.
- If Oregon is experiencing the same things we are, then there will be pressure to move northward.
- How can human health and welfare be integrated with the project?
- Thurston Thrives is looking at some climate-related things like clean energy. There's also a lot going on at the state level, climate issues, health adaptation, etc.

Presentation: Risk Assessment Process

Brewster gave a brief overview of the risk assessment methodology and process. The methodology the project team will be using is based on the EPA's workbook for Developing Risk-Based Adaptation Plans. The Risk Assessment process is generally composed of six steps: 1) establishing the community context; 2) identifying risks; 3) analyzing risks; 4) rating the risks; 5) reviewing the community's capability for handling the risks; and 6) prioritizing how risks should be addressed.

The project team is about to start the risk analysis and will be bringing information back to the group in the coming months for review and discussion. The risk analysis is a high level determination of five areas: the consequence of a risk's impact; that impact's likelihood of occurring; the spatial extent of the impact; a time horizon of when the impact will occur; and the types of habitat affected.

There are four approaches a community can take to the impacts associated with Climate Change:

- **Mitigation.** This is not mitigating climate change itself – it is mitigating the impacts of climate change. Mitigating a risk involves taking actions to reduce the likelihood and/or consequence of threat to the community's goals.
- **Transfer.** Transferring delegates responsibility of addressing a risk to another organization – it is not acceptance of the risk because another organization will be addressing the risk in some form or fashion.
- **Acceptance.** Accepting a risk means that your organization will continue with business as usual and run the risk, dealing with the impact if/when it does occur.
- **Avoidance.** Avoiding a risk requires a fundamental shift in an organization's operations or goals so that you are no longer exposed to that risk.

After Brester's presentation, the group asked questions and discussed their thoughts on the project and risk assessment:

- How far are we going in quantifying economic risk? For the vast majority of strategies, very little. For the strategies selected for a benefit cost analysis with Earth Economics, very detailed.
- How long will the risk assessment process take? The project team aims to complete the assessment by March 2017. Next month, the stakeholder group will get a taste for the risk assessment review process.
- Are we basing the risk assessment off of high level risks or just low/medium risks? For example, are we assuming just a 3' rise in sea level or the worst case scenario of 24'?
- If have any in the stakeholder group has feedback on the vulnerability assessment, get back to Mike Burnham.
- The project team will be contacting various organizations about risk assessment. Olympia will be quantifying risks associated with sea level rise. The project team is looking for economic data but would like group's feedback as data may not be readily available.
- Less optimistic scenarios: is there some value (wake-up call) in less optimistic scenarios being modeled as well as moderate scenarios?
- Skokomish tribe did review of 6' sea level rise, and now that may not be enough.
- Olympia projections are higher than what we are showing, and NOAA is even higher than that.
- What we haven't captured is that risks are exacerbated. We haven't planned for the effects of the effects. We're planning on linear risks vs. exponential changes.
- How far out are we looking in time? It might be manageable in 100 years, but might not be in 500 years.
- If you paint too bleak a picture, people shut down. Futility effect. We need to balance it all – don't paint too bleak a picture – people need to be able to feel like they can do something and have a stake in it right now.
- Astronomical and king tide influences should be considered when dealing with storm surge.
- On climate stressors: they almost seem too blank. Is increasing storminess pointing to the fact that we're seeing heavier rain in smaller periods of time?
- Increase in precipitation – the times of storms won't change but because the air is warmer it can hold more moisture.
- This past winter is more like what we'll see in the future – not just one or two days of emergency but a week of emergency.
- Subsidence: what about other parts of the coast? Is there anything regarding plate tectonics? No. The ground is rising (until the next quake).
- As other communities are inundated people will be forced to move. We'll be dealing with greater populations here.
- Vulnerability assessment looks at climate-induced migration. We'll see more people coming here as it is more protected from the impacts of climate change. Chain migration theory: our economy will attract people who do things like us. They will be the most likely to move here.
- Climate-induced migration is a real issue.
- Have there been any studies on groundwater flooding? If there's less water going into the aquifer will it actually be better? Kevin Hansen at the County is looking into this issue. Thurston County Water Resources is looking at all of the rain gauges in Thurston County and project those values out into the future
- How can you avoid a risk? Clumsy example: postal service is no longer going to deliver mail to lacey because it is too risky.

- At what point in time do we decide not to rebuild a road? Abandon a community? Sensitive ecosystems – how much more effort are you going to put into protecting ecosystems if it is a futile effort?
- Transferring risk to property owner – insurance.
- For transferring risk, someone else is committed to mitigating the risk.
- Avoiding risk is difficult because this is a community-based assessment. Individual agencies will have a greater ability to avoid risks than the community at large.

Public Comment

No members of the general public were present to comment.