Summary of Planning Commission Rationale on Key Policy Issues

The summaries below include the previous Olympia Planning Commission rationale for each policy issue to be discussed at the March 11, 2014 City Council work Session. They are taken from OPC meeting minutes and written Sponsor Proposals. (During OPC's Comp Plan review in 2012-13, each proposed policy update had an OPC Sponsor, who provided a written "Sponsor Proposal" for the full Commission to review prior to deliberation at the meeting.)

1. Carbon Footprint and Greenhouse Gas Emissions (Environment, GP and policies)

Council Direction from February 25, 2014: Council Work Session **OPC Lead for 2014:** To be determined

Background: OPC expressed they did not have the time desired to delve into this issue. The goal and policies which they passed were originally proposed by staff.

2. Sea Level Rise (Environment, GN5 & policies; Utilities, GU11 & policies)

Council Direction from February 25, 2014: Council Work Session (March 4) OPC Lead for 2014: To be determined

Background: OPC passed these recommendations on February 25, 2014

From written sponsor proposal:

"Background provided by Commissioner Bardin: Background on sea level rise - selected relevant excerpts from online documents

"Coastal development and shore protection can be mutually reinforcing. Under current policies, shore protection is common along developed shores and rare along shores managed for conservation, agriculture, and forestry. Policymakers have not decided whether the practice of protecting development should continue as sea level rises, or be modified to avoid adverse environmental consequences and increased costs of shore protection".

"In the short term, retreat is more socially disruptive than shore protection. In the long term, however, shore protection may be more disruptive—especially if it fails or proves to be unsustainable". Most shore protection structures are designed for the current sea level, and retreat policies that rely on setting development back from the coast are designed for the current rate of sea-level rise. Those structures and policies would not necessarily accommodate a significant acceleration in the rate of sea-level rise. A failure to plan now, could limit the flexibility of future generations to implement preferred adaptation strategies¹".

"Erosion is the main process that occurs to land as sea level rises. As a result, structures built by humans will be destroyed by the sea as the shoreline retreats. Entire properties can be eroded away. In some areas, a 30 cm (1 foot) rise in sea level can result in 4500 cm (150 feet) of landward erosion".

Flood insurance costs will also rise. According to FEMA, a 30 cm (1 foot) rise in sea level is expected to increase flood damages by 36-58 percent. As a result, insurance companies will have to increase flood insurance rates for coasts prone to flooding²"

Armoring:

Advantages:

Armoring is our oldest flood protection tool. It's familiar, behaves predictably and can be used in combination with other strategies to protect existing development from rising water. It can be used against both storm surge and baseline sea level rise. It also can be designed to accommodate new development such as housing along super levees, or protect threatened habitat such as sand dunes.

Disadvantages:

It is a short-term solution. All coastal armoring can be engineered only to accommodate a certain storm size or rise in sea level. It also requires costly annual maintenance and regular monitoring to ensure it remains safe. An unusually large storm event can also cause it to rupture like the levees in New Orleans during Hurricane Katrina, even if it has been well maintained.

Paradoxically, it increases vulnerability. Hard shoreline protection is not as effective as natural shorelines at dissipating the energy from waves and tides. As a result, armored shorelines tend to be more vulnerable to erosion, and to increase erosion of nearby beaches. Structural flood protection can also increase human vulnerability by giving people a false sense of security and encouraging development in areas that are vulnerable to flooding.³

1. Titus, J.G. and Cragham M. Greenhouse Effect and Sea Level Rise America Starts to Prepare. Shore Protection and Retreat. Retrieved 02/15/13 from http://papers.risingsea.net/coastal-sensitivity-to-sea-level-rise-6-shore-protection-retreat.html

2. Godard Space Flight Center. *Is Sea Level Rising? Do we have to Worry About it?* Retrieved 02/05/13 from <u>http://www.usc.edu/org/cosee-</u> west/glaciers/Issealevelrising.pdf

3. SPUR. *Ideas and Actions for a Better City, Strategies for Managing Sea Level Rise*. Retrieved 02/05/13 from

http://www.spur.org/publications/library/report/strategiesformanagingsealevelrise 11 0109

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Proposed in July Draft:

PN4.4: Protect Olympia from the potential impacts of sea-level rise.

Sponsor Proposal:

Evaluate all options including retreat to deal with the impacts of sea level rise in Olympia.

Consider different scenarios for varying amounts of sea level rise and the accompanying adaptation and responses options for each scenario.

Perform a cost-benefit analysis for each adaptation strategy. Consider the physical, environmental and social factors as well as costs in the analysis.

Evaluate different financing option for adaptation strategies.

Use the best available science and the experiences of other municipalities in formulating future plans for sea level rise.

Utilities Chapter

Proposed by Commissioner Bardin

Proposed in July Draft:

GU 11: Olympia's downtown is protected from future impacts of sea-level rise.

PU 11.2: Coordinate with other key stakeholders, such as downtown businesses, LOTT Clean Water Alliance and the Port of Olympia.

PU 11.3: Incorporate flexibility and resiliency into public and private infrastructure in areas predicted to be affected.

PU 11.4: Maintain public control of downtown shorelines that may be needed to serve flood management functions.

Sponsor Proposal:

GU 11: Olympia's downtown is protected as feasible from future impacts of sea-level rise.

Add here also: Evaluate all options including retreat to deal with the impacts of sea level rise in Olympia.

PU11.2 Coordinate with other key stakeholders, such as downtown businesses, LOTT Clean Water Alliance and the Port of Olympia, environmental and other public interest groups, and downtown residents."

From February 25, 2013 OPC Minutes:

"The item sponsor, Vice Chair Bardin, discussed the goals and policies in the July Draft dealing with sea level rise. She said the predicted rise in sea level is now higher than previously thought and described predictions for Olympia in particular. She discussed her proposed new language to be added to the existing July Draft goals and policies.

Vice Chair Bardin proposed to make policy PN4.4 a goal with additional language and new policies as outlined in the packet. She wanted to add "engage the community in a discussion of the different mitigation scenarios and adaptation strategies and response and the cost" to the list of proposed policies. The Commission discussed changing GU11 to be consistent with the new goal proposed by Vice Chair Bardin to replace PN4.4.

Commissioner Tousley moved, seconded by Commissioner Reddick, to approve the proposed language for PN4.5 and GU11, as amended. The motion passed unanimously.

Vice Chair Bardin explained her proposal to change PU11.2 to add "environmental and other public interest groups, and downtown residents" to the list of stakeholders.

Commissioner Tousley moved, seconded by Commissioner Reddick, to approve the proposed language for PU 11.2. The motion passed 8 to 1, with Commissioner Horn abstaining.

[No change - recommend same as July Draft] PU 11.3: Incorporate flexibility and resiliency into public and private infrastructure in areas predicted to be affected.

[No change - recommend same as July Draft] PU 11.4: Maintain public control of downtown shorelines that may be needed to serve flood management functions.

3. Dark Skies (Environment Chapter, GN 10 and related policies)

Council Direction from February 25, 2014: Council Work Session OPC Lead for 2014: To be determined

Background: Not really a big issue of discussion by OPC. Staff originally made these policy recommendations, and OPC passed them without much discussion.