THURSTON
CLIMATE
ADAPTATION
PLAN

Presentation: Evaluating Actions

Feb. 23, 2017

thurston regional planning council

Risk & Action Assessment Recap

- **Steps 1-2:** Define project area, gather stakeholders and establish goals *[July-September 2016]*

- **Step 3:** Identify how climate opportunities and risks affect goals *[October 2016]*

- **Step 4:** Assess risks (*probability, consequence, extent, time horizon*) *[November 2016]*

- **Step 5:** Compare risks (*put in Consequence/Likelihood matrix*) *[December 2016]*

- **Step 6:** Evaluate strategies (*take action or accept risk*) and potential actions and partners *[January 2017]*

- **Step 7:** Evaluate actions *[February-May 2017]*

CLIMATE SUMMIT

WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- ETC. ETC.

Source: Joel Pett, *USA Today*

Evaluating Risks

- Put the net **126** risks into a Consequence/Likelihood Matrix (*right*)

  - **53** risks fall in the upper-right third (RED)
    - These are of *most* consequence and likelihood

  - **41** risks fall in the middle third (YELLOW)
    - These are generally of *lesser* consequence or likelihood

  - **32** risks fall in the lower-left third (GREEN)
    - These are of *least* consequence and likelihood

Consequence/Likelihood Matrix

Likelihood	Low	Medium	High
High	38, 39, 40, 41, 42, 93, 98, 108, 109, 122, 123,	6, 11, 14, 20, 21, 29, 30, 31, 32, 43, 61, 63, 78, 79, 82, 90, 92, 137, 138,	3, 7, 8, 10, 12, 13, 22, 24, 25, 26, 27, 28, 52, 54, 55, 58, 59, 62, 75, 76, 81, 83, 101, 102, 103, 104, 114,
Medium	4, 5, 45, 46, 47, 66, 68, 94, 95, 96, 97, 111, 112, 124, 125, 126,	9, 15, 16, 17, 18, 19, 23, 33, 35, 36, 37, 64, 69, 80, 84, 86, 88, 89, 91, 105, 106, 107, 121, 132, 133, 139	56, 57, 77, 85, 87, 115, 120,
Low	51, 67, 71, 72, 74, 99, 110, 113, 118, 119, 129, 135, 136,	1, 50, 65,	60, 116, 117,131,

#s correspond with Risk Analysis Table

Consequence

Selecting Strategies

- Project team selected a strategy for all **126** risks:

  - **Take Action:** Lower the consequence and/or likelihood of the risk

    - Includes <u>continuing</u> effective actions, <u>recommending</u> new actions, or <u>assisting</u> responsible partners (e.g., transferring to state or federal agencies)

  - **Accept:** Run the risk — accept that consequences may occur, monitor and reevaluate strategy periodically.

- Stakeholders reviewed and revised strategies for the **53** red risks of highest consequence and likelihood

  - **47** risks received a "Take Action" strategy.

  - **6** risks received an "Accept" strategy.

Evaluating Actions

- **Project team:**

  - Consolidated or reworded several risks to eliminate redundancy, enhance clarity

  - Drafted **129** actions to address all red risks with a "Take Action" strategy

    - Identified all other risks each action would address.

    - As a result, every risk with a "Take Action" strategy (**green** and **yellow** included) is addressed by at least one action.

  - Developed **5** screening criteria to prioritize actions (*right*)

Criteria		Answer Range
Magnitude:	How many risks does this action address?	*(One, Few, or Many)*
Effectiveness:	Is this action a long-term solution (i.e., durable)?	*(Yes or No)*
	To what degree would this action reduce the risk(s)?	*(High, Medium, Low)*
Side-effects:	Would this action have negative effects on other goals?	*(Yes or No)*
Equity:	Would the costs and benefits of this action be shared equally?	*(Yes or No)*

Next Steps

- **Group Exercise:**

  - **Step 1:** Today, break into five groups to review and revise the actions, grouped by theme (*right*).

  - Consider the following questions:
    - Should some actions be reworded, consolidated or split?
    - What additional actions are needed?

  - **Step 2:** On March 23 (*Meeting 8*), use screening criteria to evaluate revised list of actions.

  - **Step 3:** On April 27 (*Meeting 9*), incorporate additional actions and general feedback from April 17 public forum.

  - **Step 4:** On May 11 (*Meeting 10*), use screening criteria to prioritize actions and select some for Benefit-Cost Analysis.

Theme	Actions
Habitat, Animals, Plants, and Agriculture	19
Infrastructure, Roads, Energy, and Pollution	28
Stormwater, Flooding, Erosion, and Landslides	25
Water Use and Water Conservation	25
Wildfire and Hazard Response	32