Climate Change Adaptation Certification Tool

Welcome to the Climate Change Adaptation Certification Tool

Use it to **assess** the climate readiness of any project or policy
to **ensure** the durability of not only the action being taken, but also the investment of resources expended.

EcoAdapt™
Meeting the challenges of climate change

CAKEx.org/adaptation-certification

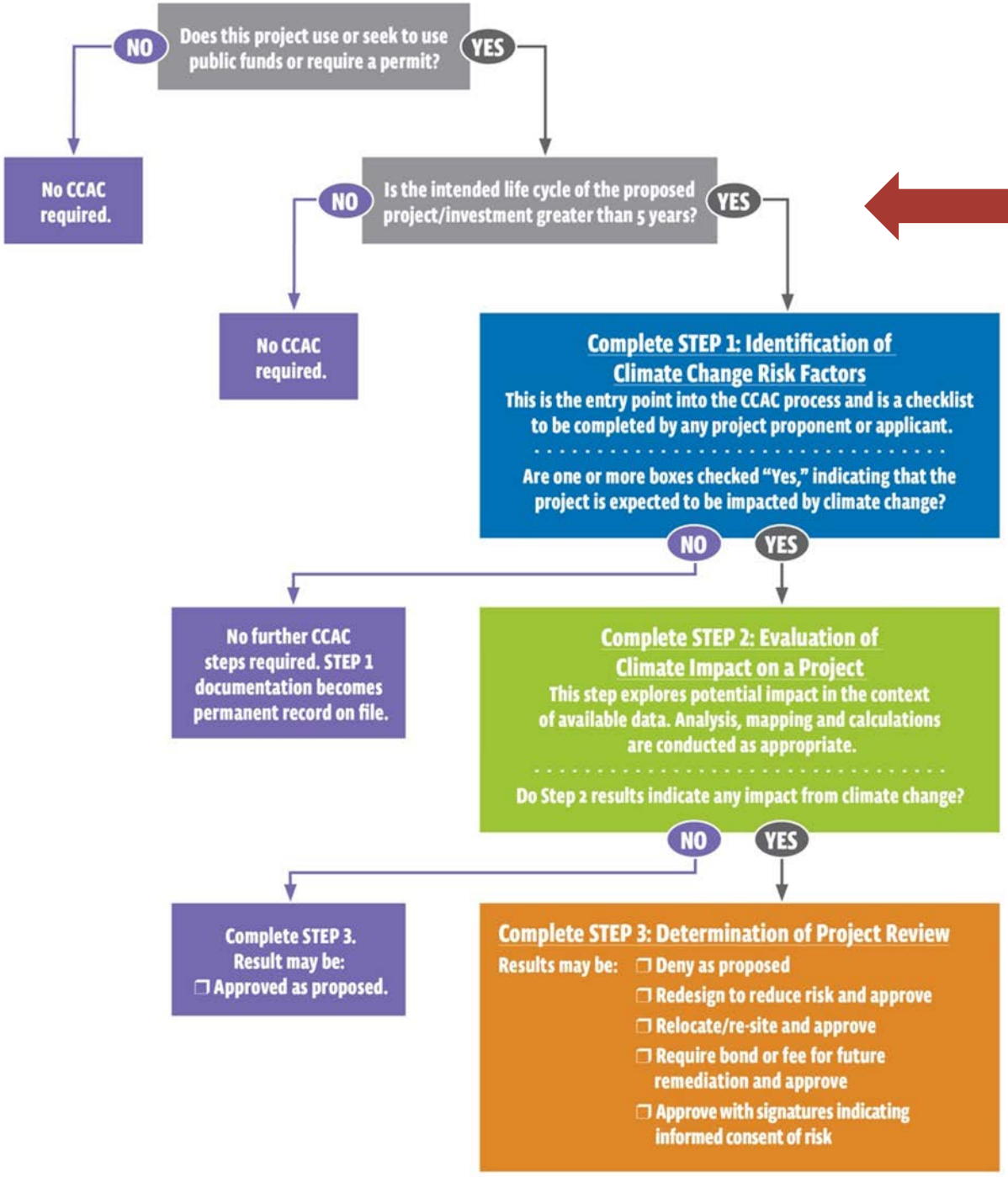
Climate Change Adaptation Certification Tool

This tool can be applied to:

- permitting,
- capital expenditures,
- planning,
- siting or site design,
- services/programming, or
- any other day-to-day projects or policies

to determine if climate change has been sufficiently considered or is still a problem that needs to be addressed.

Follow the RED text throughout this presentation for a tour of how to use the CCAC in your own decision making!

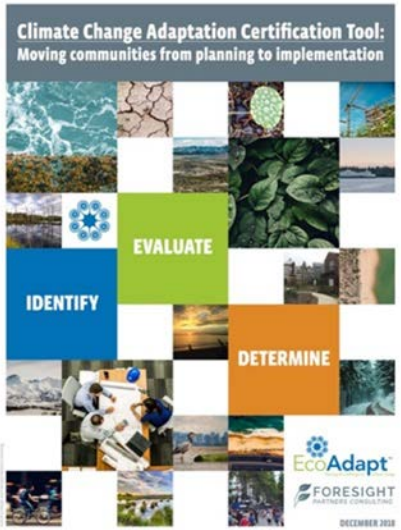


The CCAC is simple to use. It follows a straightforward 3-step process that adapts to your input at each step.

Climate Change Adaptation Certification (CCAC)

Pathway to Climate Savvy

3 Simple Steps



3-Step Process that requires no previous training or knowledge of climate change!

1

IDENTIFY

Answering simple yes or no questions, identify which climate risk factors are relevant to the project you are assessing

CHECK ALL YOUR "YES" FACTORS			
❒ PRECIPITATION	❒ SEA LEVEL RISE	❒ SLOPE STABILITY	❒ POPULATION CHANGES
❒ TEMPERATURE	❒ VEGETATION CHANGES	❒ OCEAN ACIDIFICATION	❒ GREENHOUSE GAS EMISSIONS

2

EVALUATE

The Risk Factors you identify determine the evaluation questions you will use to guide you to readily available data and easy to follow criteria to delineate vulnerabilities and consider alternatives.

Check your "YES" factors from STEP 1	Climate Change Risk Factor	Complete the Evaluation Questions for Each Checked Factor									
		A	B	C	D	E	F	G	H	I	J
❒	PRECIPITATION	✘		✘	✘	✘		✘	✘		
❒	TEMPERATURE			✘		✘	✘	✘	✘		
❒	SEA LEVEL RISE	✘	✘								
❒	VEGETATION CHANGES	✘			✘		✘	✘	✘		
❒	SLOPE STABILITY				✘						
❒	OCEAN ACIDIFICATION					✘				✘	
❒	POPULATION CHANGES										✘
❒	GREENHOUSE GAS EMISSIONS						✘	✘			

3

DETERMINE

Based on your answers to the evaluation questions, you can make a climate-informed determination to proceed with the project, modify the project, take action to ameliorate adverse impacts of the project that cannot be avoided, or reject the project.

Is the CCAC needed for what I'm doing?

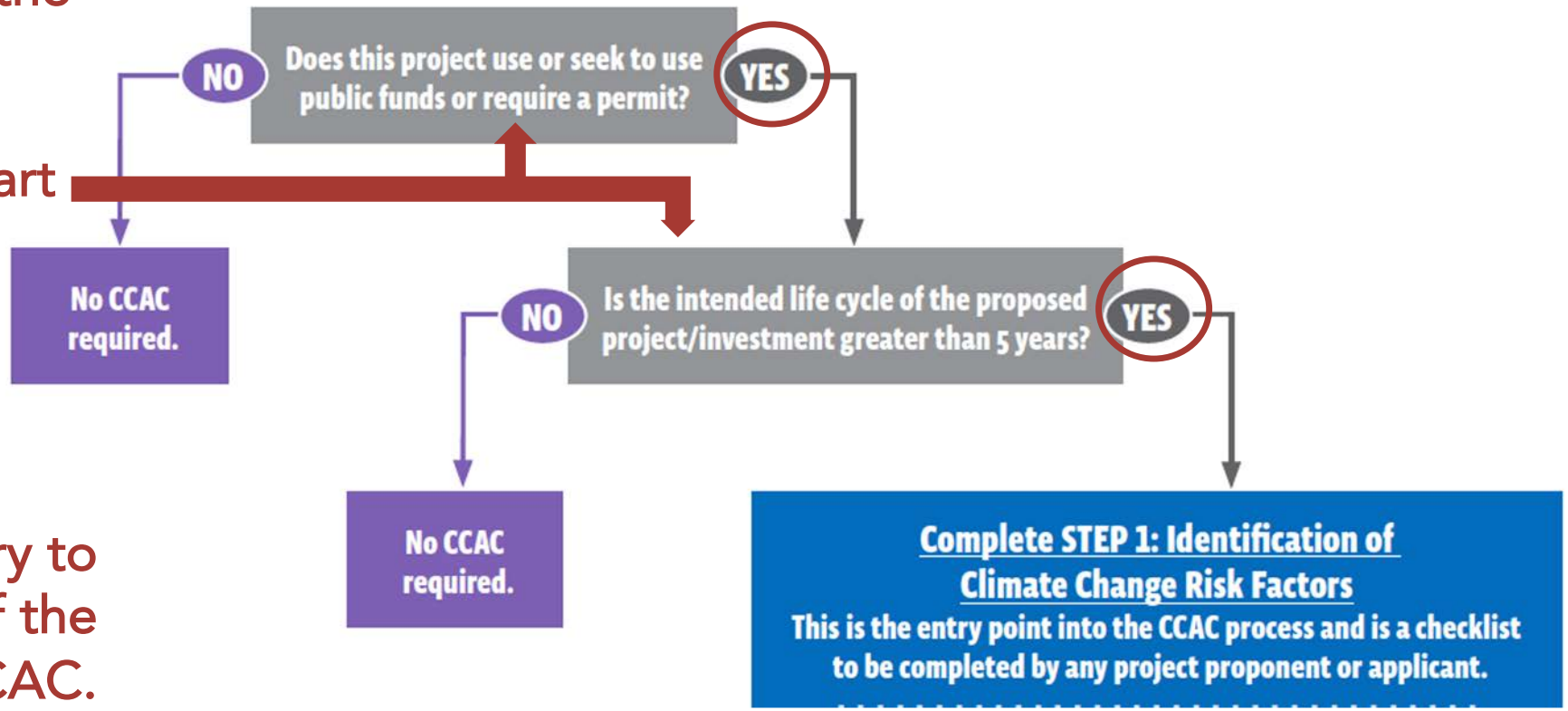
For this example we will be exploring a flood mitigation project for a road in a riparian zone.

PROJECT:

Deer Creek Flood Mitigation Project – repair flood damage on the Deer Creek Road caused by a spring flood event, and replace four culverts along the road

This project answers YES to the first two questions on the Climate Change Adaptation Certification (CCAC) Flowchart

- It uses public funds
- It requires a permit
- Its lifecycle will be greater than five years



Therefore it is necessary to proceed to STEP 1 of the CCAC.

STEP 1: Identification of Climate Change Risk Factors

PROJECT:

Deer Creek Flood Mitigation Project – repair flood damage on the Deer Creek Road caused by a spring flood event, and replace four culverts along the road

Answer Yes or No questions based on existing knowledge and the information you have readily available.

If you answer Yes to any questions in Column 2, check Yes in Column 3

Climate Change Risk Factors	• Identify if the following issues could affect the project over its lifetime. • Check all that apply. • If one or more of these boxes is checked, check YES in Column 3.	Climate Change Risk Identified For
PRECIPITATION Changing patterns will result in different and greater extremes, duration, and intensity.	My project or access to it: ❒ involves proper **sizing of stormwater infrastructure** to treat and accommodate run-off. ❒ involves **diversion or impoundment** of surface water. ☒ involves **culverts, bridges, retaining walls or other structures** within a riparian area to convey water or prevent flooding. ❒ relies on a **predictable and reliable water supply.** ❒ is within or near a mapped **flood zone.** ☒ is affected by **nuisance, localized or chronic flooding** that is known generally to occur, though not mapped. ❒ may be vulnerable to **erosion or landslides.** ❒ relies on a predictable, reliable, and affordable **power supply and other utilities.** ❒ is located within a **Wildland-Urban Interface** boundary or may be vulnerable to wildfire. ❒ relies on **sanitary sewers or community/private septic systems.** ❒ intersects with the **multimodal transportation** system. ❒ other possible effects of precipitation changes (attach information and explanation).	**PRECIPITATION** ☒ YES ❒ NO
TEMPERATURE Changes will include more extremes and prolonged highs or lows.	My project or access to it: ❒ relies on a **predictable and reliable water supply.** ❒ may be vulnerable to **wildfire.** ❒ uses **energy** generated by fossil fuel combustion (on site or from a power utility). ☒ will have a **maintenance budgets for repairs and replacements.** ❒ relies on **good air quality.** ❒ intersects with the **multimodal transportation** system. ❒ involves **habitat creation, restoration, or enhancement** that relies on current temperature levels for successful implementation. ❒ other possible effects of temperature changes (attach information and explanation).	**TEMPERATURE** ☒ YES ❒ NO

STEP 1: Identification of Climate Change Risk Factors

PROJECT:

Deer Creek Flood Mitigation Project

CLIMATE CHANGE RISK FACTORS:

1. Temperature
2. Precipitation
3. Sea Level Rise
4. Vegetation Changes
5. Slope Stability
6. Ocean Acidification
7. Population Changes
8. Greenhouse Gas Emissions

Climate Change Risk Factors	· Identify if the following issues could affect the project over its lifetime. · Check all that apply. · If one or more of these boxes is checked, check YES in Column 3.	Climate Change Risk Identified For
VEGETATION CHANGES Long-term temperature and precipitation changes will cause shifts in regional vegetation.	**My project or access to it:** ❒ could be affected by changes in **vegetation**. ☒ could be affected by changes to transportation **corridor buffers** and impacts to roadways (brush fires, deadfall, water flow, etc.). ❒ could be affected by **increased fuel load and wildfire risk** (e.g., potential for dead-wood and detritus as die-off occurs increasing the fuel load and risk for wildfires). ❒ has energy demands for heating and cooling that could increase if the percentage of **tree-cover/ canopy changes.** ❒ other possible effects of vegetation changes (attach information and explanation).	**VEGETATION CHANGES** ☒ YES ❒ NO
SLOPE STABILITY Sea level and precipitation changes compromise once stable slopes.	**My project or access to it:** ☒ relies on the **integrity** of nearby slopes. ❒ proposes **development or investment** on or near a slope. ❒ other possible effects of slope instability (attach information and explanation).	**SLOPE STABILITY** ☒ YES ❒ NO
POPULATION CHANGES Climate migration and regional population changes may have local/regional implications.	**My project or access to it:** ❒ relies on a **stable population.** ☒ is designed and **built to serve the current population.** ❒ could be adversely affected if population were to **increase or decrease in our region.** ❒ could be affected by future **climate migrants.** ❒ other possible effects of population changes (attach information and explanation).	**POPULATION CHANGES** ☒ YES ❒ NO
GREENHOUSE GAS EMISSIONS Mitigation of future greenhouse gas emissions and fossil fuel dependence are driven in part by local/ regional permitting decisions.	**My project or access to it:** ☒ does not **take cars off the road** or **decrease idling times.** ☒ neither improves nor increases **access to non-motorized transportation options.** ❒ is dependent on fossil fuel and does not use **renewable energy** sources sufficient to cover demand. ❒ other possible effects of greenhouse gas emissions (attach information and explanation).	**GREENHOUSE GAS EMISSIONS** ☒ YES ❒ NO

STEP 1: Identification of Climate Change Risk Factors

PROJECT: Deer Creek Flood Mitigation Project

Synopsize Column 3 at the end of STEP 1

CHECK ALL YOUR "YES" FACTORS			
☒ PRECIPITATION	☐ SEA LEVEL RISE	☒ SLOPE STABILITY	☒ POPULATION CHANGES
☒ TEMPERATURE	☒ VEGETATION CHANGES	☐ OCEAN ACIDIFICATION	☒ GREENHOUSE GAS EMISSIONS

- For each Climate Change Risk Factor that indicated "YES" to climate risk, evaluation of the project is now required.
- Proceed to STEP 2 and answer each Evaluation Question marked as Required.
- If you did not check any "YES" factors, no further CCAC steps are required. STEP 1 documentation becomes permanent record on file.

If you answered **NO** to all questions in STEP 1, the CCAC may not be the tool for you, Do not proceed to STEP 2.
However it does not mean that climate change is not a concern for your work.
In fact, you might want to **review your answers** once for good measure. We've found very few projects for which none of the criteria presented applied.

STEP 2: Evaluation of Climate Impact on a Project

PROJECT:
Deer Creek Flood Mitigation Project

Carry over STEP 1 results to determine which questions you will need to answer in STEP 2

For Deer Creek, they will need to complete Evaluation Questions A, C, D, E, F, G, H & J.
Questions B & I can be skipped.

Check your "YES" factors from STEP 1	Climate Change Risk Factor	Complete the Evaluation Questions for Each Checked Factor									
		A	B	C	D	E	F	G	H	I	J
☒	PRECIPITATION	X		X	X	X		X	X		
☒	TEMPERATURE			X		X	X	X	X		
☐	SEA LEVEL RISE	X	X								
☒	VEGETATION CHANGES	X			X		X	X	X		
☒	SLOPE STABILITY				X						
☐	OCEAN ACIDIFICATION					X				X	
☒	POPULATION CHANGES										X
☒	GREENHOUSE GAS EMISSIONS						X	X			

STEP 2: Evaluation of Climate Impact on a Project

A B C D E F G H I J

For each Evaluation Question there is a:

1) **Question with recommended data sources**
2) Narrative Analysis for use in your evaluation
3) Menu of **results** options

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

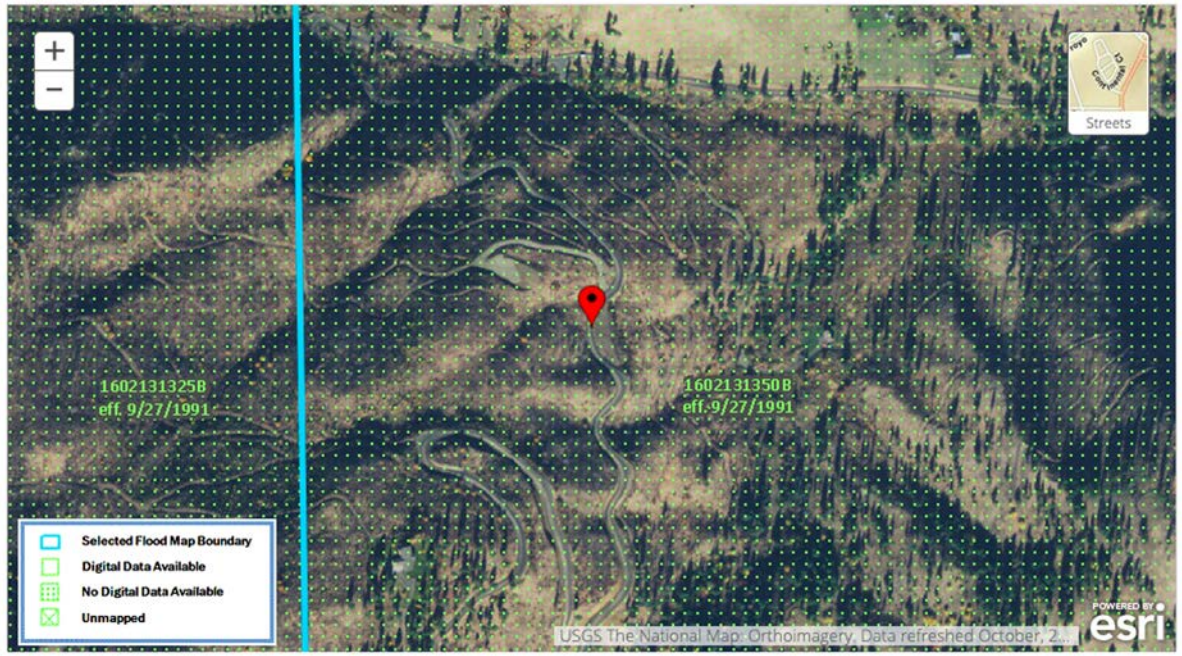
Question with recommended data sources

A **Evaluate project susceptibility to flooding and determine impact.**

1. Map project area in relation to flood zones and frequently flooded areas. Use local or regional flood zone data, NOAA Coastal Flood Exposure Mapper, or the FEMA Flood Map Services Center.

No digital data available (see FEMA map)

It is important to document and show our work as you develop the answer to each question. This will allow for traceability and review.



STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

Narrative analysis for use in your evaluation

EVALUATION QUESTIONS:

A **Evaluate project susceptibility to flooding and determine impact.**

2. Provide a narrative review explaining overlap and document whether project area is affected by nuisance, localized, or chronic flooding that is known to occur, though not necessarily mapped.

No flood maps available to visualize overlap. However, area is affected by landslides and localized flooding that occurs during heavy precipitation events and/or rain-on-snow events.

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

A **Evaluate project susceptibility to flooding and determine impact.**

1. Map project area in relation to flood zones. No digital data available (see FEMA map)
2. Provide a narrative review. No flood maps available to visualize overlap. However, area is affected by landslides and localized flooding that occurs during heavy precipitation events and/or rain-on-snow events.
3. Document RESULT:

Menu of results options

- ❑ Project unaffected by flooding or flood zones.
- ❑ Assessment indicates climate change risk to project that cannot be avoided.
- ☒ Assessment indicates climate change risk to the project, but risk could be minimized by:

Relocation of road above floodplain; installing larger and re-positioning culverts

Select a result based on the analysis of the evaluation question. Providing your ideas for minimizing impact or risk from climate change can help in creating a path forward at the determination in STEP 3.

Review the remaining questions identified for this example to see how they went about about answering them.

We won't guide you on each slide, but you can follow along with:

- what data they used,
- how they evaluated it, and
- what they identified as their result.

Next Slide

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

C **Evaluate project stormwater infrastructure design and its ability to accommodate future hydrological conditions.**

1. Calculate stormwater design based on:
   - Projected flow rates for 2050 (calculate flows using future precipitation flow rates as inputs)
2. Provide a narrative review comparing infrastructure sizing requirements to accommodate historical flows versus anticipated future flows.
3. Document RESULT:
   - ❑ Project unaffected by future hydrologic conditions.
   - ❑ Assessment indicates climate change risk to project that cannot be avoided.
   - ❑ Assessment indicates climate change risk to the project, but risk could be minimized by:

_____

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

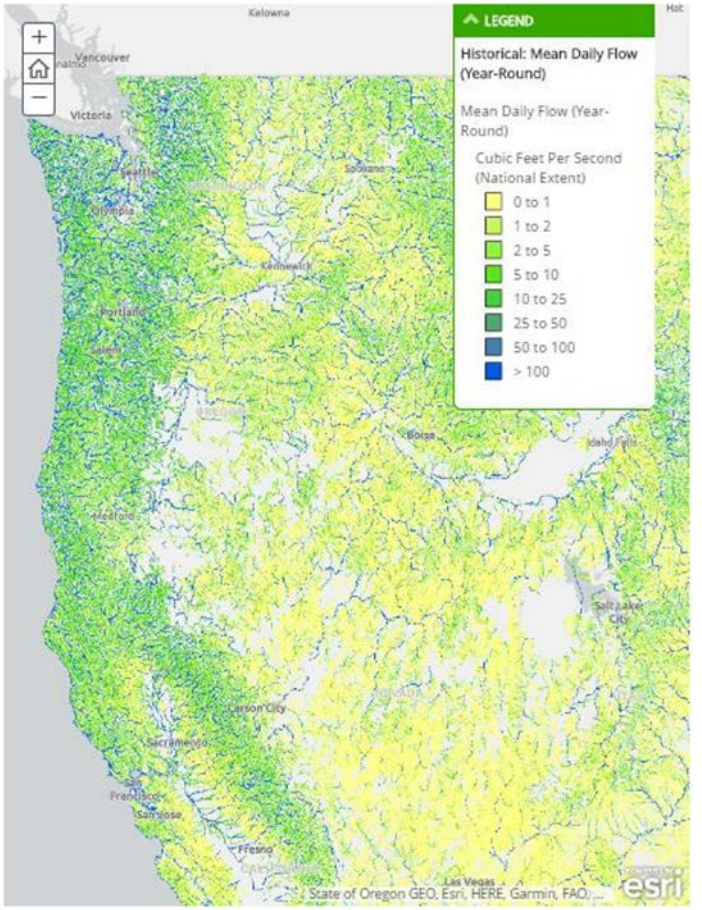
EVALUATION QUESTIONS:

C **Evaluate project stormwater infrastructure design and its ability to accommodate future hydrological conditions.**

1. Calculate stormwater design based on projected flow rates for 2050
   - Historical Mean Daily Flow (Year-Round): **2.18 cfs**
     2040 Mean Daily Flow (Year-Round): **2.22 cfs**
   - Historical 25-Year Flood: **40.77 cfs**
     2040 25-Year Flood: **41.84 cfs**
   - 2080 25-Year Flood: **66.26 cfs**
2. Provide a narrative review comparing infrastructure sizing requirements to accommodate historical flows versus anticipated future flows.

Culverts will need to be 50% larger to accommodate projected increase in flows during flood events

Western U.S. Streamflow Metrics Dataset



STEP 2: Evaluation of Climate Impact on a Project

PROJECT:

Deer Creek Flood Mitigation Project – repair flood damage on the Deer Creek R ing flood event, and replace

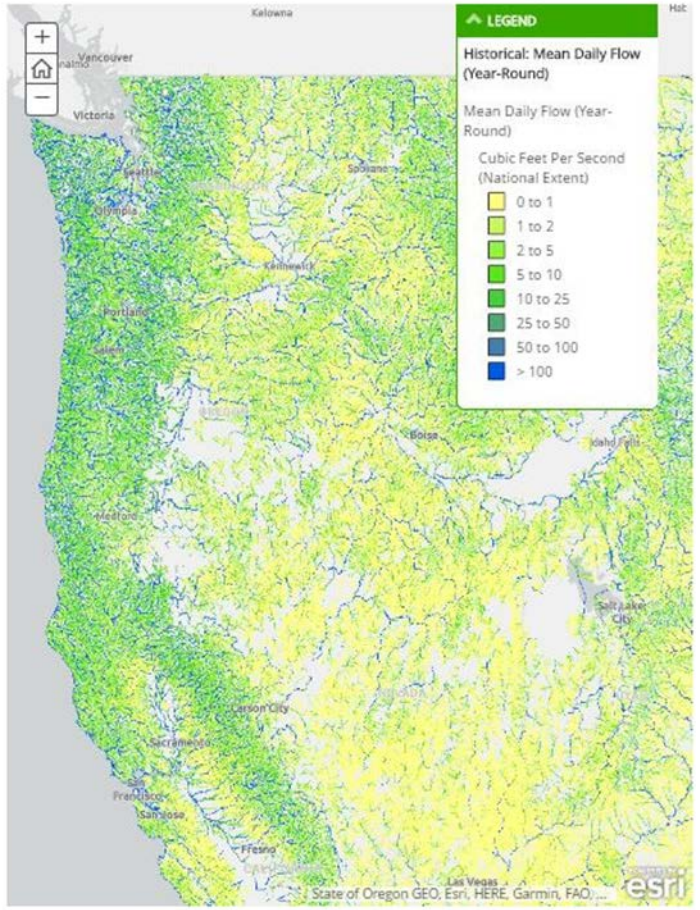
EVALUATION

C **Evaluate its ability to accor**

1. Calculate s r 2050
   - Historic 2040 Me
   - Historical 25 2040 25-Year Fl
   - 2080 25-Year Flood: **66.28 cfs**
2. Provide a narrative review comparing infrastructure sizing requirements to accommodate historical flows versus anticipated future flows.

What if projected flow rates don't exist for my area?

Western U.S. Streamflow Metrics Dataset

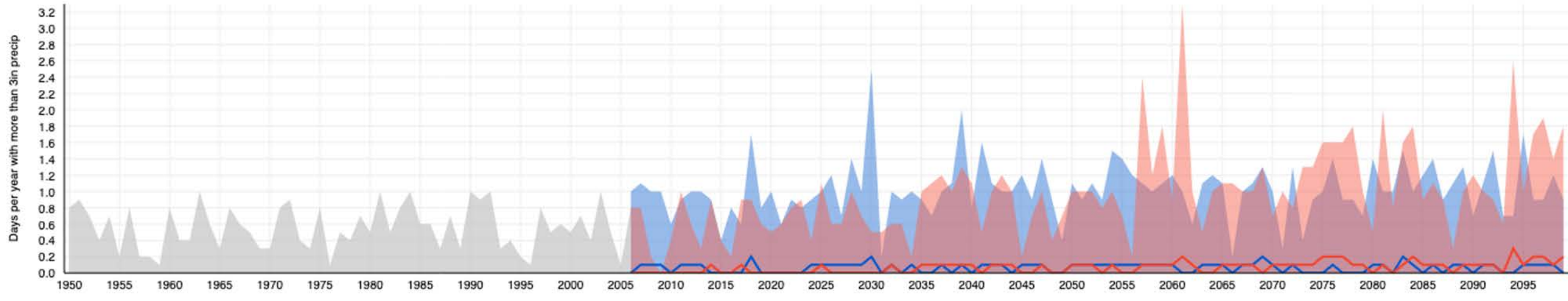


STEP 2: Evaluation of Climate Impact on a Project

EVALUATION QUESTIONS:

C **Evaluate project stormwater infrastructure design and its ability to accommodate future hydrological conditions.**

1. Calculate stormwater design based on projected flow rates for 2050. **Find existing precipitation and/or flooding projections for your region and use it to calculate projected flow rates and/or provide a narrative review documenting likely challenges with projected changes.**
   - Climate Explorer (total annual precipitation, days w/ >1-3" of precipitation)



STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

C **Evaluate project stormwater infrastructure design and its ability to accommodate future hydrological conditions.**

1. Calculate stormwater design.

   2040 25-year Flood: 41.84 cfs; 2080 25-year Flood: 66.26 cfs

1. Provide a narrative review.

   Culverts will need to be 50% larger to accommodate projected increase in flows during flood events.

1. Document RESULT:

   ☒ Assessment indicates climate change risk to the project, but risk could be minimized by: resizing culverts to accommodate projected changes in flow rates during extreme flooding

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

D **Evaluate project vulnerability to landslides and other geologic hazards.**

1. Map your project and its access corridors using local Geological Hazardous Areas Maps.

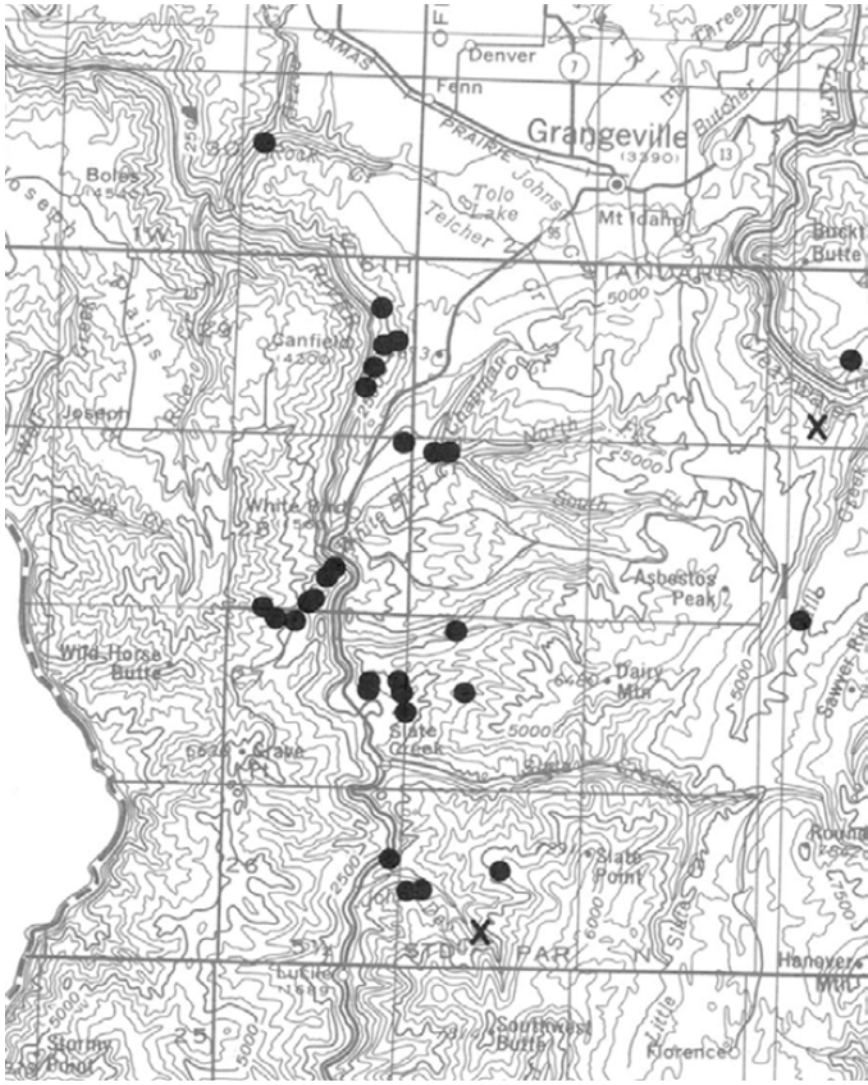
County hazard maps unavailable; see historic landslides map

1. Provide a narrative review of your project in relation to slope stability.

Deer Creek Road is a narrow and winding gravel route that has historically been impacted by landslides and flooding.

3. Document RESULT:

☒ Assessment indicates climate change risk to the project, but risk could be minimized by: revegetating hillsides with native plants and trees likely to persist under climate change



STEP 2: Evaluation of Climate Impact on a Project

E **Evaluate project dependence on and access to the reliable provision of basic utilities (water supply, septic/sewer) that function over time without compromising the health of relevant ecosystems.**

1. **Map your project area and show it in relation to:**
   - Regional and/or local aquifer recharge area maps (e.g., Critical Aquifer Recharge Areas maps)
   - Wellhead Protection Area mapping
   - Watershed boundaries
   - Identify National Pollution Discharge Elimination System (NPDES) permitted outfalls or discharges

2. **Provide a narrative review that:**
   - Demonstrates a predictable, reliable and affordable water supply for the lifespan of your project under future predicted precipitation and temperature patterns.
   - Explains any water saving measures your project employs.
   - Explains your leach field or sewer outfall drainage basin in the context of its over-saturation or dehydration (either of which can render a septic/sewer ineffective).
   - If your project will utilize a discharge facility subject to an NPDES permit, explain your understanding of the relationship between stormwater and sewage discharge permits and ocean acidification, which may compromise stormwater and sewage discharge compliance making capital projects/ investment for additional siting or capacity necessary.

PROJECT: Deer Creek Flood Mitigation Project (ID)

Document RESULT:

- ☒ Project unaffected by either the provision or failure of basic utilities.
- ☐ Assessment indicates climate change risk to project that cannot be avoided.
- ☐ Assessment indicates climate change risk to the project, but risk could be minimized by:

_____

STEP 2: Evaluation of Climate Impact on a Project

F Evaluate project dependence on and access to the reliable provision of a power supply and its source.

1. **Calculate:**
   - Insulation requirements based on projected future winter lows and summer high temperatures;
   - Anticipated maintenance budget for items (e.g., HVAC systems) vulnerable to unplanned heavy service demands due to more extreme weather (e.g., if future use becomes greater than currently budgeted, what will be the cost to future owners/operators?).

2. **Provide a narrative review explaining:**
   - A comparison of insulation requirements and effectiveness due to calculations based on historical versus future temperature projections;
   - All sources of energy upon which your project will depend, including back-up generators;
   - Use of renewable energy, or site design/features that enable renewables to be used or later installed (e.g., is your energy generated by fossil fuel combustion? Is there an opportunity to produce power on site and is your project designed to facilitate that? Did you situate/orient structures on site to maximize its ability to employ on-site renewable energy generation such as passive or active solar?);
   - If relying on tree canopy for passive heating or cooling, explain your energy needs as they may change over time with changes in tree-cover/canopy (e.g., active heating and cooling needs will increase as vegetation on-site matures or dies off);
   - How your project will decrease idling times, improve access to non-motorized transportation, or otherwise improve the transit system itself;
   - Any existing greenhouse gas inventories to which your proposed project would be a contributor (positive or negative).

PROJECT: Deer Creek Flood Mitigation Project (ID) –

Document RESULT:

- ☒ Project unaffected by changes in energy demand, access, or cost.
- ☐ Assessment indicates climate change risk to project that cannot be avoided.
- ☐ Assessment indicates climate change risk to the project, but risk could be minimized by:

_____

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

G Evaluate project connection to multimodal transportation.

Provide a narrative review explaining how motorized and non-motorized transit will be influenced by your project. Will non-motorized and/or public transit be increased or supported by this project (e.g., creation of bike lanes, sidewalks, or non-motorized paths)? Will this project increase automotive miles driven or idle times?

Project improves road/driving conditions, which may benefit multimodal transit but there are no specific provisions for anything other than automotive traffic.

RESULT:

- ❒ Project will facilitate multimodal transportation.
- ☒ Assessment indicates no accommodation of multimodal transit.
- ❒ Assessment indicates that multimodal transit could be accommodated by:

STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

EVALUATION QUESTIONS:

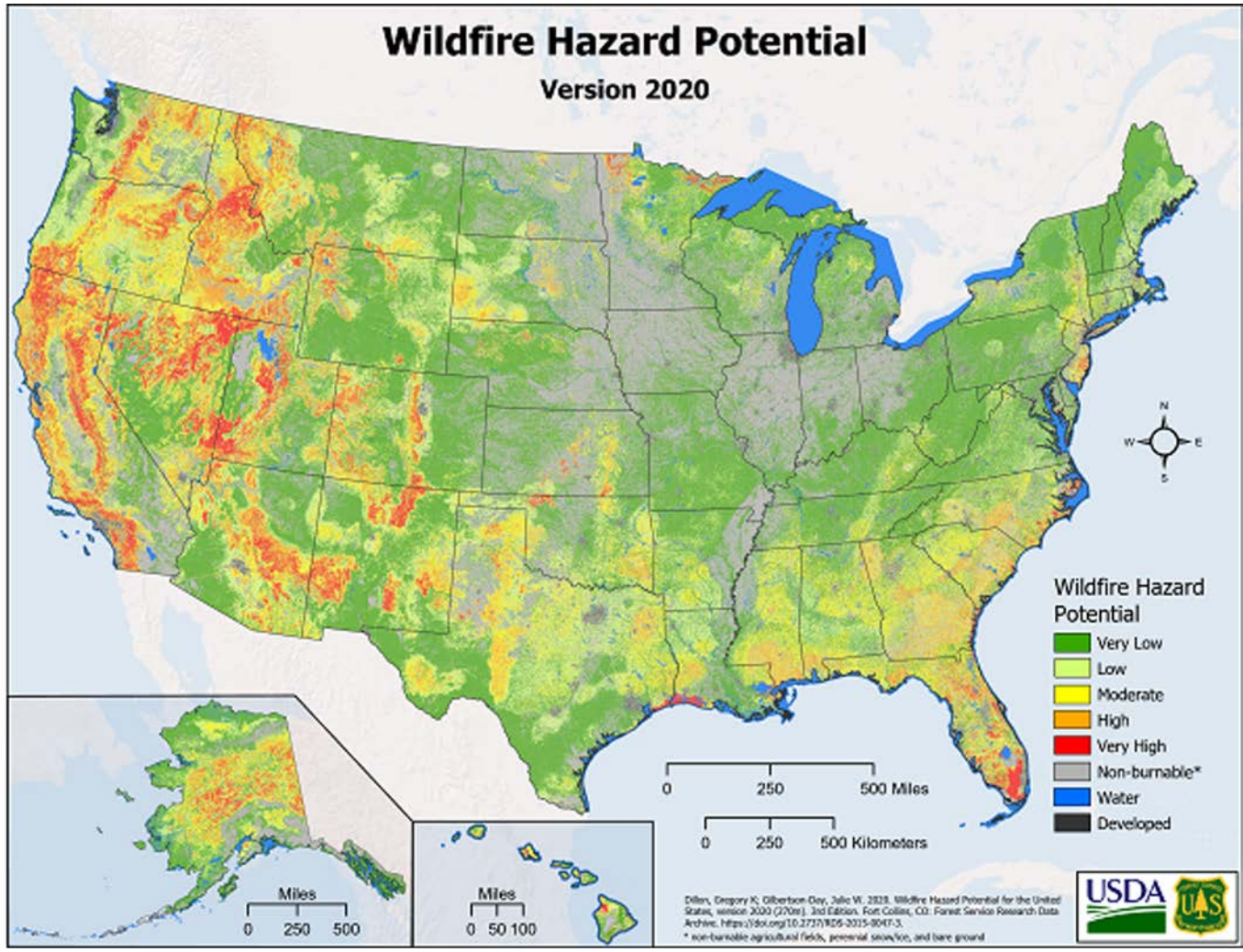
H **Evaluate project area susceptibility to wildfire.**

1. Map your project's proximity to the Wildland Urban Interface and/or wildfire hazard areas.
2. Provide a narrative review that demonstrates understanding of how long-term changes in temperature and precipitation may shift vegetation and habitats that affect your project area's vulnerability to wildfire.

➡ Wildfire hazard potential appears high to very high.

3. Document RESULT:

☒ ❑ Assessment indicates climate change risk to the project, but risk could be minimized by: revegetating upslope areas with fire-adapted/fire-resilient species; removing invasive species that increase fine fuels



STEP 2: Evaluation of Climate Impact on a Project

PROJECT: Deer Creek Flood Mitigation Project

J Evaluate the connection between the project and local and regional population.

Provide a narrative review explaining how your project will function over time relative to population change. Will either increases or decreases (possibly due to climate migration) affect the long-term success of your project? Do your anticipated outcomes depend on certain local or regional population statistics?

Significant increases in population and/or use of the road could increase wear-and-tear on the road, resulting in increased maintenance costs and/or frequency, and could shift timing of maintenance to earlier than anticipated

RESULT:

- ❒ Project unaffected by population.
- ❒ Assessment indicates climate change risk to project that cannot be avoided.
- ☒ Assessment indicates climate change risk to the project, but risk could be minimized by (explain here or in attachment):

Recommend monitoring to continually assess road condition and determine necessary upgrades

STEP 3: Determination of Project Review

PROJECT: Deer Creek Flood Mitigation Project

Based on the Evaluation Question answers, one valid determination would be to redesign the project to reduce risk prior to approval. Included in the determination are the actions that should be taken to achieve a more durable project.

CCAC Determination:

- ❑ **Project approved as proposed.** Low risk from future climate conditions.
- ❑ **Project denied**. High risk that cannot be minimized or avoided with project alterations
- ☒ **Project redesigned to reduce risk and approved.** Explain how risk was reduced.

  Relocating road outside the floodplain, revegetating upslope areas with fire-adapted/resilient native species and removing invasive species that increase fine fuels, installing larger and re-positioning culverts in areas known to collect water
- ❑ **Project relocated/sited in alternate location and approved**. Explain how risk was reduced because of this move.
- ❑ **Project approved with conditions**.
- ❑ **Project approved with informed consent regarding the risk.** Describe risk.

STEP 3: Unanswered Questions

The example we used did not result in the inclusion of Evaluation Questions B and I.

Those questions are addressed in the following slides from unrelated examples.

Next Slide

STEP 3: Unanswered Questions

PROJECT: Eagle Harbor Road Replacement

B **Evaluate local sea level rise projections relevant to project area and determine impact.**

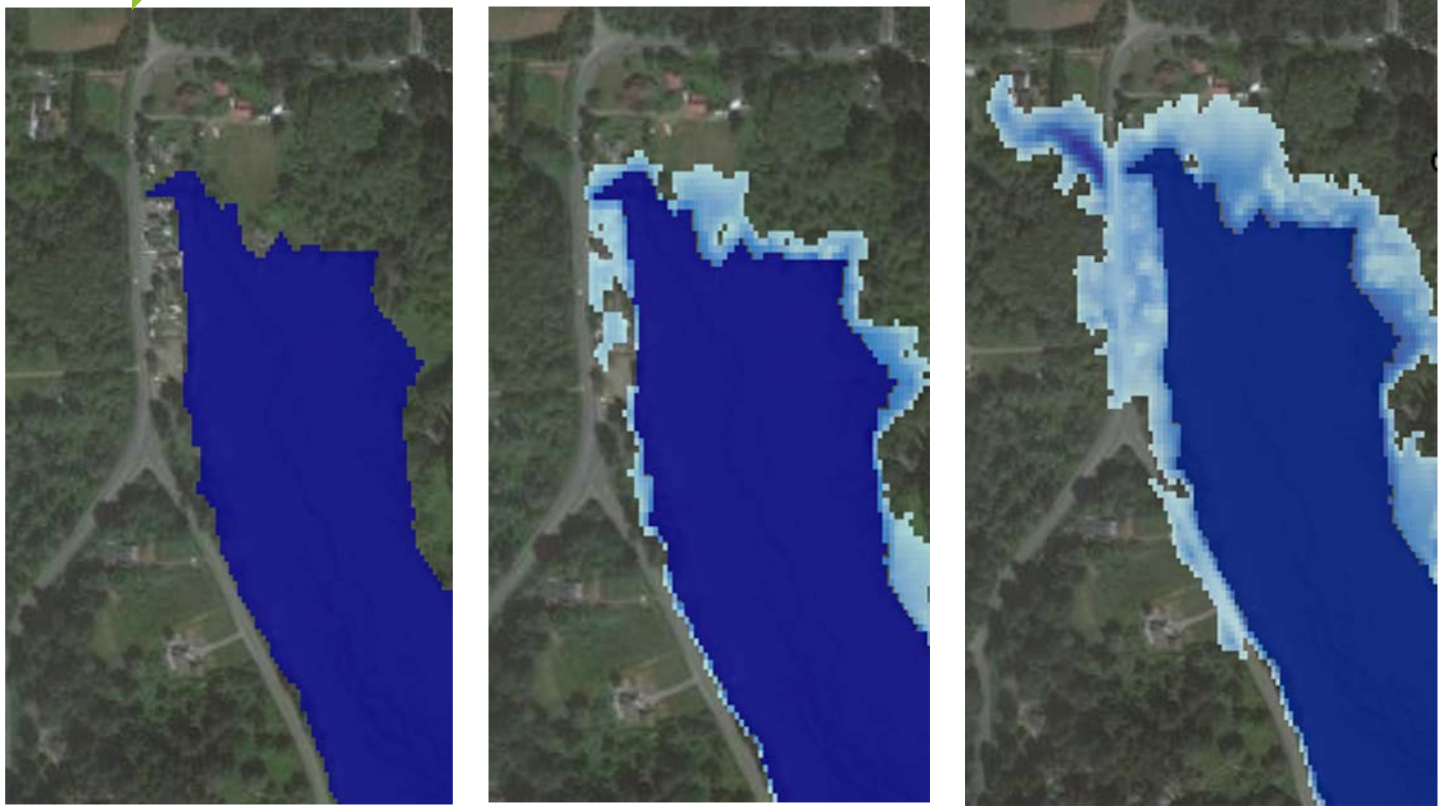
1. **Get local sea level rise projections for 2100**
   If options exist, use high greenhouse gas emissions scenarios (e.g., RCP8.5), likely or 50% assessed probability of exceedance.

2. **Apply these values on a sea level rise viewer:**
   - NOAA Sea Level Rise Viewer: https://coast.noaa.gov/slr

3. Compare the sea level rise viewer outputs with project site map or local GIS layers to evaluate vulnerability of:

- Project footprint
- Transportation corridors to access site
- Utilities (e.g., power transmission, sewer/septic, drainage, any other essential elements)

Projection for 2100 is between 2.3' and 5.2'



current sea level | ~2.3 feet | ~5.2 feet

STEP 3: Unanswered Questions

PROJECT: Eagle Harbor Road Replacement

B **Evaluate local sea level rise projections relevant to project area and determine impact.**

4. **Provide a narrative review** explaining inundation, interaction with tides, erosion with or without slope stability issues, and any interaction with upstream flows.

A 2.3 foot increase in sea level will inundate properties along the seaward side of the road and be at the road edge. Regional tides will certainly result in seasonal if not monthly flooding on this road.
A 5.2 foot increase in sea level will inundate the road completely.

RESULT:

- ❒ Project unaffected by sea level rise.
- ❒ Assessment indicates climate change risk to project that cannot be avoided.
- ☒ Assessment indicates climate change risk to the project, but risk could be minimized by (explain here or in attachment):

This road should be elevated or relocated. Either way will require new connectivity for the residents on this stretch of road.

STEP 3: Unanswered Questions

PROJECT: Permit for installation of oyster farm infrastructure

I Evaluate project connection to a healthy ocean environment.

Provide a narrative review explaining your project as it relates to:

- Marine discharge permits. Altered seawater pH may adversely affect compliance if discharge cannot be adjusted under these changing water chemistry conditions.
- Locally managed or harvested shellfish and whether the decline in shellfish populations affect your project or deem it unsustainable.
- Any other marine activities that affect or are affected by altered pH or related water chemistry changes.

Local marine waters are anticipated to have further reduced pH. Locally larval settling has already been diminished. Growth rates of oyster spat may diminish over the next 20 years.

RESULT:

- ☐ Project unaffected by changes in ocean chemistry.
- ☐ Assessment indicates climate change risk to project that cannot be avoided.
- ☒ Assessment indicates climate change risk to the project, but risk could be minimized by (explain here or in attachment):

If the proponent is still interested, require use of removable infrastructure to eliminate coastal hazard when operation is no longer viable.

Climate Change Adaptation Certification Tool

Apply the CCAC to your own work.

It can be found at:
CAKEx.org/adaptation-certification

EcoAdapt™
Meeting the challenges of climate change

www.EcoAdapt.org