



Initiative #6: Environmental Stewardship

INITIATIVE INFORMATION

Business Unit/Division	Environment, Land and Licensing Business Unit						
Initiative Executive Sponsor	Lynn Best, Chief Environmental Officer						
Initiative Project Manager	Colleen McShane, William Deveraux, Kate Engel						
Legally mandated/Required?	Some components are required						
(\$000's)	2019	2020	2021	2022	2023	2024	Total
O&M \$ Amount*	300	323	323	323	323	323	1.9
CIP \$ Amount*	0	0	0	0	0	0	0
Total \$	0	323	323	323	323	323	1.9
FTEs assigned* **	2	2.15	2.15	2.15	2.15	2.15	2.15

* This reflects existing budget. Additional budget that was requested was not funded

** This reflects existing staff level. One additional FTE requested, not approved

INITIATIVE SUMMARY

A. Description:

Continue industry leadership in improving our protection of the ecosystem in which we operate. Projects include:

- a) Implement the Climate Change Adaptation Plan, emphasizing distribution grid resilience
- b) Continue ecologically-sound vegetation management on City Light transmission line right of ways in a way that reduces maintenance needs, improves habitat values and achieves Right-of-Way Stewardship Council (ROWSC) Accreditation (**Not funded due to budget constraints**).
- c) Eliminate PCBs from our system. A software tracking system is being developed. Upon completion of the system, begin planned removal of PCBs
- d) Provide additional funding for environmental mitigation in response to agencies' findings or legal requirements. The utility must cover unanticipated mitigation expenditures. (**Not funded due to budget constraints**).
- e) Continue emphasis on the environmental equity program which focuses on the external impacts of City Light's construction, environmental programs, policies and processes that affect communities of color and underserved communities

B. Context:

- a) The Climate Change Adaptation Plan work is led by the Environment, Land and Licensing business unit (ELL) and is part of the Utility's ongoing work. This aspect (increasing the resilience of the distribution grid) would depend on the Engineering and Technology Innovation Business Unit hiring a senior engineer. No additional costs in ELL.
- b) Integrated Vegetation Management (IVM) was in the first Strategic Plan as a pilot. This work would continue. All costs are included in this initiative.
- c) Remove PCBs. This was in the first Strategic Plan but was delayed due to the need for a new PCB data base. No new money is requested.
- d) ELL has a very small CIP budget to cover unexpected needs for environmental mitigation. This would add \$500,000 to the CIP starting in 2020.
- e) ELL has an existing environmental equity program. There is one Environmental Equity position. This work is being highlighted to respond to requests. No new funding.

C. Component(s)/Objective(s) of initiative:

- a) Climate. In the last few years, progress has been in understanding and preparing for climate impacts to hydropower, fish habitat, and infrastructure, but more support is needed to implement actions in City Light's Climate Change Adaptation Plan and to implement components of the Climate Change Adaptation Plan related to increasing climate resilience for the distribution grid.
- b) Integrated Vegetation Management. Collect baseline ROW-specific data; test and evaluate the effectiveness of integrated vegetation management (IVM) practices; develop an IVM program for City Light's three major 230-kV lines; and achieve accreditation from the ROWSC.
- c) Remove PCBs. Develop a comprehensive environmental management plan to systematically test the oil in all transformers that do not have documented PCB concentrations and replace all transformers with PCB concentrations of 1.0 ppm or higher.
- d) Environmental Mitigation. Allow City Light to be nimble enough to meet environmental mitigation requirements and lessen time needed to address mitigation requirements both improving City Light's ability to protect the environment and reducing liability over compliance issues.
- e) Environmental Equity. Continue to develop our environmental equity program to help ensure that we are engaging environmental justice communities to help environmental programs and policies and that the impacts and benefits of City projects affect communities' equitability.

D. Business Value:

- a) Climate resilience for the distribution grid is a critical part of preparing City Light for a changing climate including weather extremes which can impact outages and reliability. The inability to address these issues

can also result in delay of utility operations. Improving climate resilience for the distribution grid will increase reliability of the system and reduce costs of emergency line repair.

- b) Integrated vegetation management is expected to reduce maintenance cost due to low-growing native species requiring less frequent management than non-native vegetation, and native species being more fire resistant. Puget Sound Energy estimated a \$700/mile savings using a more targeted non-mowing approach. Low growing plant communities are often relatively stable, which reduces the risk of an outage. Some weed species are extremely flammable and are required for control by state and county regulations.
- c) The cost of cleaning an oil spill can vary from a couple hundred dollars to close to a million dollars for a PCB contaminated spill. The successful removal of PCBs will result in the significant budget savings and reduced liability.
- d) Increasing funding for environmental mitigation will significantly reduce the delay in addressing regulatory findings and reduce the time operations are on hold.

E. Opportunity for increased revenues and/or decreased costs:

These proposals could decrease costs over time as described in Business Value above.

2019 – 2024 INITIATIVE MILESTONES AND DELIVERABLES

Milestone	Due Date	Milestone Definition and Comments
Initiative Start		
Climate Resilience Implementation for the Distribution Grid	Q1/2020	Engineering, Technology and Innovation (ETI) BU hires Senior Engineer for innovation including climate resilience implementation for the distribution grid.
	Q1-Q4 /2020	Research and information gathering. Identify needs, gaps, and prosed solutions.
	Q4/2021	Continue research assessment of innovative climate solutions and prioritize proposed solutions for implementation
	2022--2024	Refine, prioritize, and plan for implementation of proposed solutions.
IVM Program - ROW Mapping	Q1/2020	Hire new FTE to lead IVM Program
	Q2/2020	Data Gaps Analysis for Right-of-Way (ROW) Mapping
	Q3/2020	Software selected
	Q4/2022	230 kV ROW vegetation mapping complete
IVM Plan Development	Q4/2020	Overall IVM Plan developed (includes communication plan and community outreach)
	Q3/2023	Individual 230 kV ROW IVM Plans Complete
IVM Certification	Q4/2024	Certification Received
Skagit Pilot	Q1/2022	Implementation complete (including site selection, study design and permitting)
	Q4/2024	Monitoring complete

Remove PCBs from SCL System	Upon completion of the IT project	Once the software system is up and running, transfer existing CIP budget to ELL. Develop annual plan for PCB removal and carryout plan
Environmental Mitigation	2020-2024	Ensure that unanticipated needs are met annually; either project completed, or work initiated each year

SOCIAL EQUITY

Research shows that less advantaged communities are often impacted the most by climate change. Ensuring the utility's climate resilience would support environmental equity.

- a) The goal of the environmental equity program is to increase equity outcomes for all City Light programs and projects that affect environmental justice communities.
- b) Many City Light ROWs go through environmental justice communities. Reducing the use of pesticides and improving the habitat in City Light ROWs will benefit these communities.

METRICS FOR SUCCESS AND METHOD FOR MEASUREMENT

We will measure success by evaluating progress toward milestones annually.

STAKEHOLDER OR CUSTOMER IMPACT

Implementing climate resilience solutions reduces the impacts on infrastructure and reliability. Customers highly value reliability of the system. City Light customers also highly value our commitment to environmental stewardship.