



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 | 0 | 389 | 314 | 216 | 216 | 216 | 1,351 |
| CIP \$ Amount | 0 | 500 | 500 | 500 | 500 | 500 | 2,500 |
| Total \$ | 0 | 889 | 814 | 716 | 716 | 716 | 3,851 |
| FTEs assigned** | | 1 | | | | | 1 |

* Additional budget requested

** New FTE requested

INITIATIVE SUMMARY

A. Description:

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

- Implementing the Climate Change Adaptation Plan, emphasizing distribution grid resilience
- Continuing 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
- Eliminating PCBs from our system - a software tracking system is being developed. Upon completion of the system, begin planned removal of PCBs.
- Provide additional funding for environmental mitigation needed in response to agencies' findings or legal requirements. The utility needs to be able to cover unanticipated mitigation expenditures.
- Continuing 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:

- The Climate Change Adaptation Plan work is led by Environment, Land and Licensing Busin(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.
- Integrated Vegetation Management (IVM) was in the first structure plan as a pilot. This would continue that work. All costs are included in this initiative.
- 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.
- ELL has a very small CIP to deal with unexpected needs for environmental mitigation. This would add \$500,000 to the CIP starting in 2020.
- ELL has an 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:

- 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. The Engineering and Technology Innovation Business Unit is planning to hire a Senior Engineer to implement components of the Climate Change Adaptation Plan related to increasing climate resilience for the distribution grid.
- 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.
- 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.
- 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.
- 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:

- 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.

- 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.
- 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.
- 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 | ETIBU hires Senior Engineer for innovation including climate resilience implementation for the distribution grid. |
| | Q1-Q4 /2020 | Research and information gathering. Identify needs, gaps, and proposed 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.

- The goal of the environmental equity program is to increase equity outcomes for all City Light programs and projects that affect environmental justice communities.
- Many of 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.