



# Welcome to the Fauntleroy Creek Culverts Replacement Project open house!

- Learn more about the project's purpose, options and schedule
- Speak with project staff
- Provide feedback on the project through our interactive boards and comment form



# Project Overview

- Replacement of two existing culverts at 45th Ave SW and California Ave SW
- Both culverts are near failing; replacement culverts must meet state law for fish passage



## Project Timeline

Tentative schedule as of March 2019.  
Schedule is subject to change.

**OPTIONS  
ANALYSIS (2019)**

**Design  
(2020- Spring 2021)**

**Construction  
(2021-2024)\***

\* For completion of both culverts. Construction will likely be staggered.



# Project challenges and opportunities



## Fully developed area with nearby buildings and residences

Close proximity to residential buildings and busy roads complicate design and construction. 76 residential units are clustered around the culvert at 45th Ave SW.



## Poor structural condition

Both culverts are approximately 100 years old, in poor structural condition and need replacement



## Challenging access

Steep site conditions make ongoing maintenance access difficult and unsafe



## Fish passage regulations

Current culverts do not meet state laws and are barriers for fish to pass into the upper channel of Fauntleroy Creek

## Project opportunities

- Reduce the risk of culvert failure and address storm related flooding
- Restore critical fish passage and tribal treaty-reserved rights
- Create a healthier Fauntleroy Creek ecosystem
- Accommodate higher flows anticipated with climate change
- Enhance the community's connection to the Fauntleroy watershed
- Provide safer working conditions for SPU and private maintenance crews



# Options analysis

The project team has identified several culvert replacement options. **When the culvert is replaced, it must be designed to meet current fish passage requirements.** We are now analyzing the options based on the following criteria:

- Technical feasibility
- Cost-effectiveness\*
- Overall habitat improvement
- Partnership opportunities (Fauntleroy Church, Salmon in Schools Program, Seattle Parks and Recreation, WSDOT Ferries, etc.)
- Operations and maintenance costs
- Benefits to the community
- Short-term and long-term community impacts

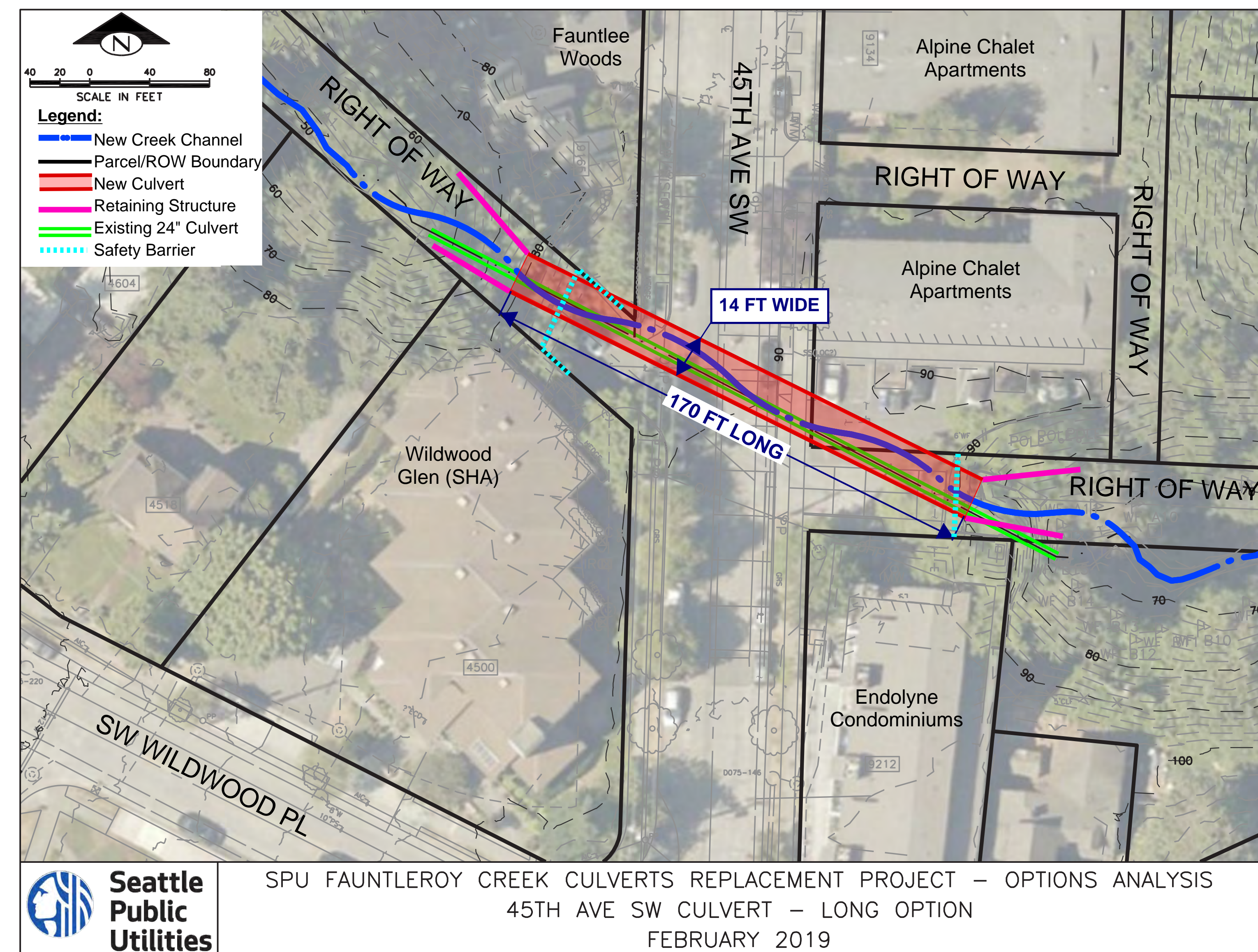
\*Note that cost estimates for options under consideration are not yet available. Cost effectiveness will be considered in SPU's evaluation and selection of a preferred option.





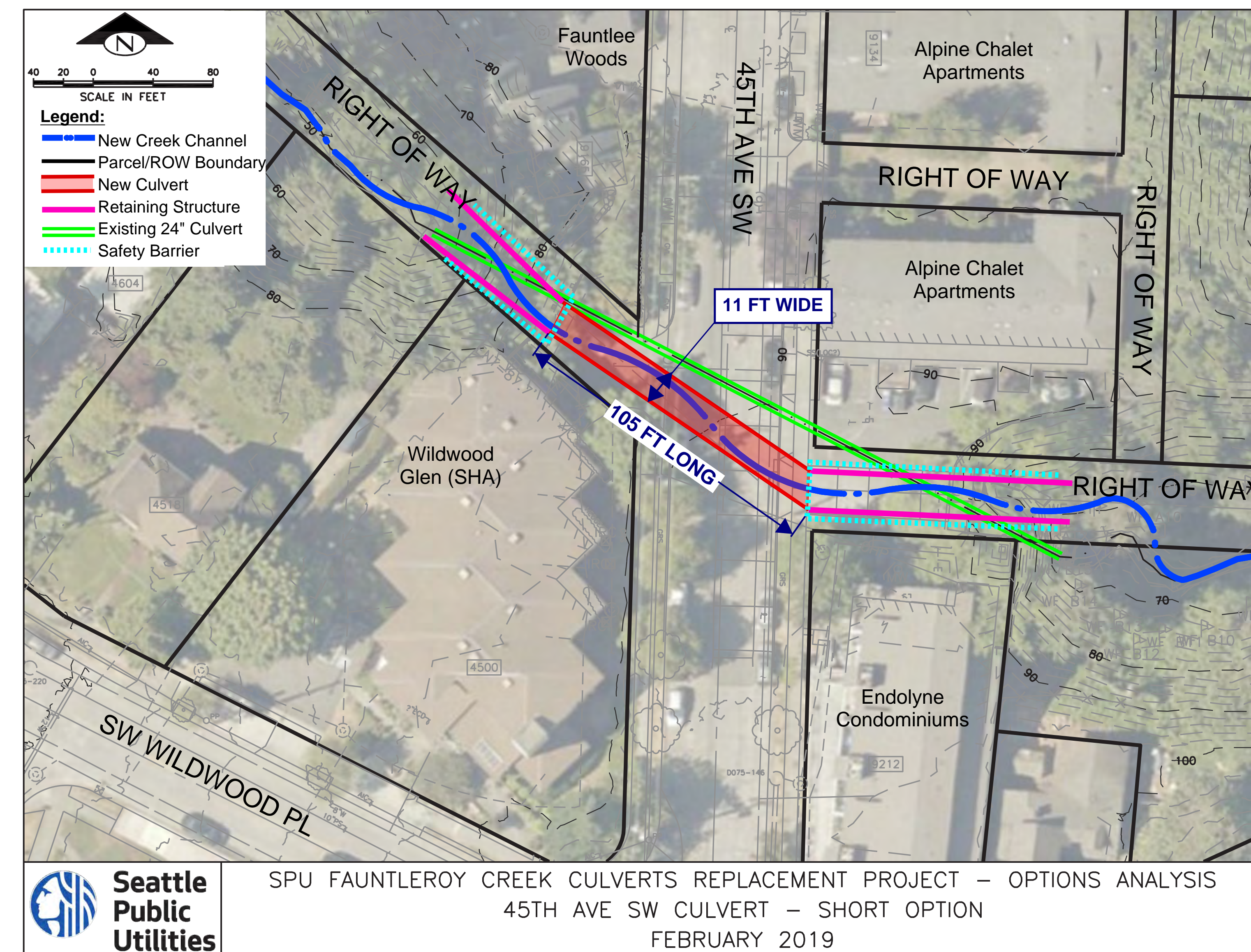
# 45th Ave SW Culvert Replacement options

## Long option



- Longer, 14-foot wide culvert on similar alignment with retaining walls on each end
- Some additional fish habitat created due to shorter design than existing culvert
- No significant long-term impacts to site conditions; site use and access stays the way it is now
- Moderate improvement to stream's natural function
- Moderate maintenance option

## Short option



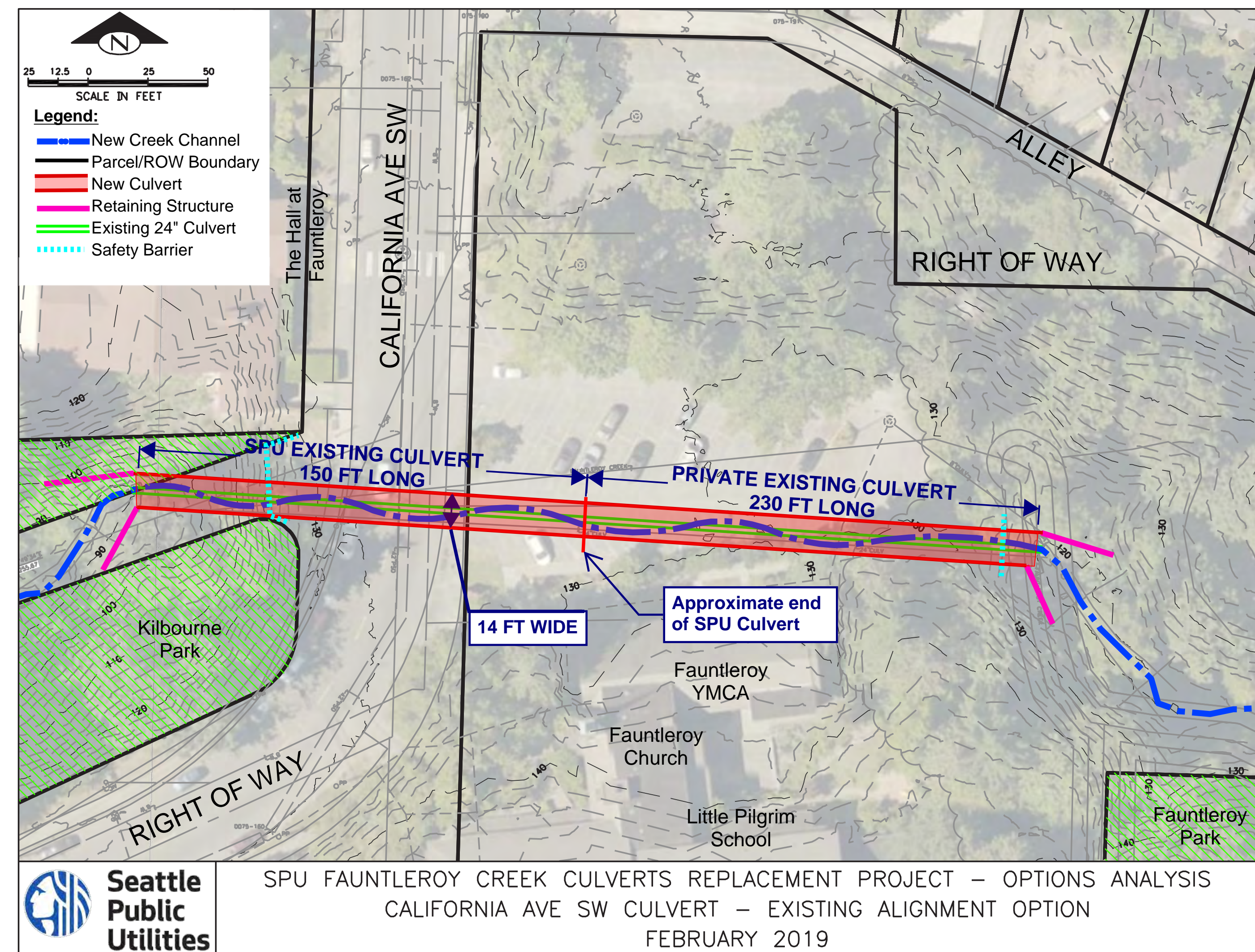
- Shorter 11-foot wide culvert with daylighted channel sections and significant retaining walls at each end
- Greater fish habitat benefits due to daylighted channel sections at either end
- Significant long-term changes in site use; reconfiguration of parking access from right-of-way to Alpine Chalet and Endolyne apartments
- Significant improvement to stream's natural function
- Least maintenance option

All options are conceptual and details are subject to change.



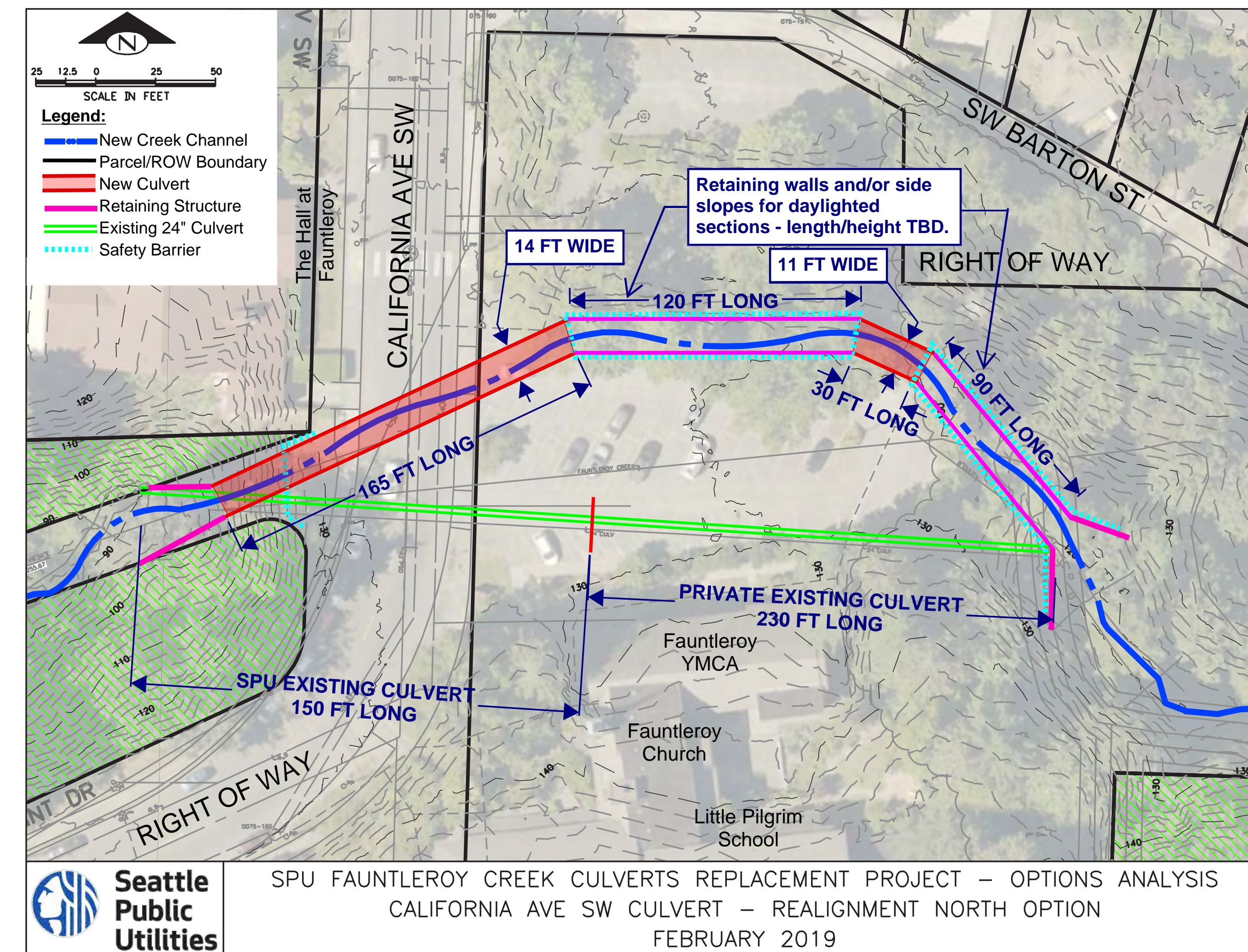
# California Ave SW Culvert Replacement options

## Existing alignment option



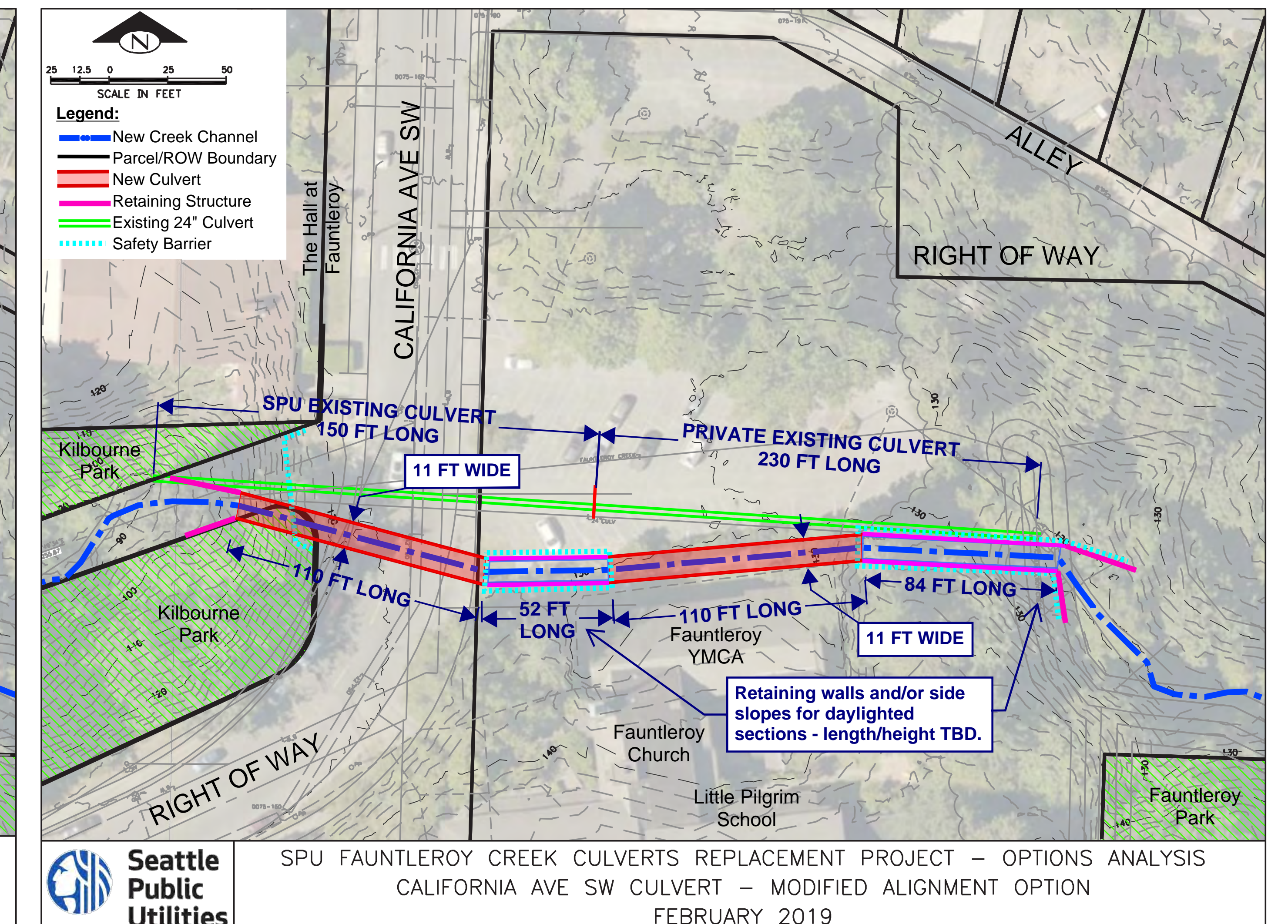
- 14-foot wide SPU culvert and 14-foot wide private culvert on similar alignment with retaining walls on both ends
- Limited fish habitat created due to long culvert design
- Some improvement to stream's natural function
- Moderate maintenance required

## Realignment North option



- Multi-segment culvert with both 14-foot wide and 11-foot wide sections on a new alignment, including significant daylighted creek channel sections and retaining walls
- Significantly increased fish habitat due to daylighted sections
- Significant improvement to stream's natural function
- Least maintenance required
- Allows for use of existing culvert for bypass creek during construction, removing schedule restrictions; potential to reduce costs

## Modified alignment option



- Multi-segment 11-foot wide culvert, on nearby alignment, including significant daylighted creek channel sections and retaining walls
- Moderately increased fish habitat due to daylighted sections
- Moderate improvement to stream's natural function
- Less maintenance required
- Allows for use of existing culvert for bypass creek during construction, removing schedule restrictions; potential to reduce costs

All options are conceptual and details are subject to change.



# Community considerations

## 45th Ave SW

- Long-term impacts related to use of site
- Short-term impacts related to construction
- Potential changes to use of right-of-way on both sides of 45th Ave SW, reconfiguration of parking access and garbage service
- Opportunities to increase community's connection to urban creek habitat
- Amount of disturbance to community when performing maintenance activities
- Pedestrian safety

## California Ave SW

- Long-term impacts related to current and future use of site
- Short-term impacts related to construction
- Partnership opportunities with Fauntleroy Church as the owner of the private section of the culvert
- Extent of fish habitat restoration, and availability of supplemental funding tied to habitat improvements
- Opportunities to increase the community's connection to the urban creek habitat
- Potential for SPU to move forward with public culvert replacement on their own, if necessary
- Pedestrian safety

# Project schedule

Tentative schedule as of March 2019. Schedule is subject to change.



\* For completion of both culverts. Construction will likely be staggered.

## What happens in design?

- Further site investigation to inform early design
- Working with property owners to explore design options and to avoid, minimize or mitigate impacts
- Permitting with federal and state agencies and consultation with tribes
- Cost refinement
- Finalizing design to prepare for construction



# Next steps

## Additional work in current options analysis phase

- SPU gathers community feedback on options and continues to refine options analysis, including evaluation of costs and funding
- SPU continues to collaborate with Fauntleroy Church on options and decisions related to the privately-owned culvert in the California Ave SW portion of the project
- SPU selects a preferred alternative for the public culverts and shares our decision with the community, prior to entering design phase

## How you can stay involved

- **Share your feedback:** Contact the Project Manager, Cody Nelson, with your thoughts on the options if you weren't able to share everything tonight.
- **Receive updates:** Visit the Fauntleroy Creek Culverts Replacement project webpage to stay up to date and sign up to receive project update emails.



Photo courtesy of Kersti Muul



# What is your vision for the neighborhood environment?

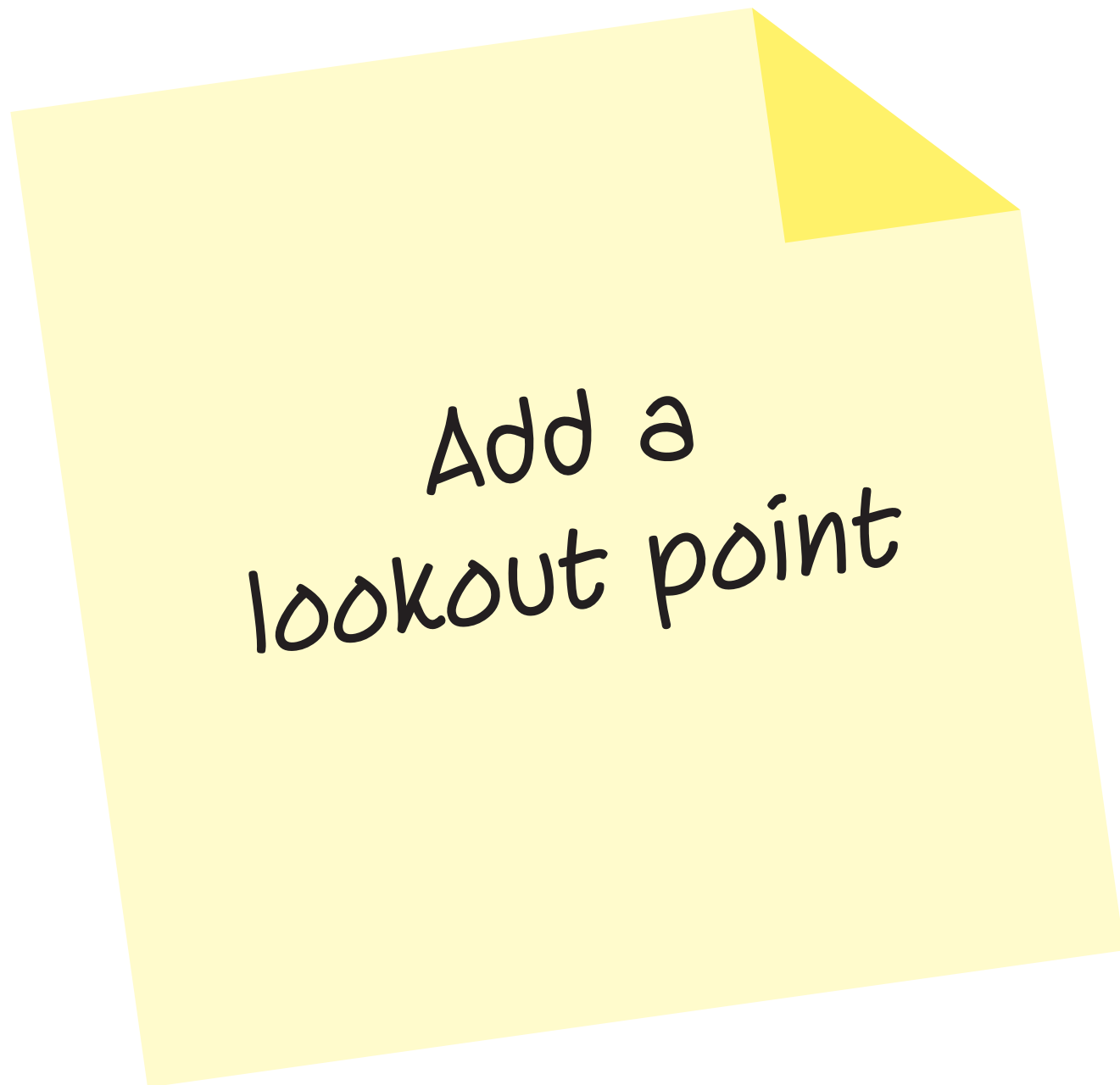


**LEGEND**

- 1 Fauntleroy Way roadway culvert and fish ladder (SPU)
- 2 45th Ave SW roadway culvert (SPU)
- 3a California Ave SW roadway culvert (SPU)
- 3b California Ave SW private culvert (Fauntleroy Church)

Place a sticker to show where you currently access and enjoy Fauntleroy Creek.

What opportunities do you see for enhancing neighborhood connection to this natural area?





# Project preferences

Design options present tradeoffs. This includes the opportunity to enhance creek habitat with open channel sections. However, these features require retaining walls and potential realignment that can have greater short-term construction impacts, as well as require long-term changes to existing site conditions. Place a dot to indicate your preferred approach to balancing these tradeoffs.



**More habitat created, resulting in increased changes to existing site conditions**

**Less habitat created, resulting in fewer changes to existing site conditions**