

## Introduction and Background

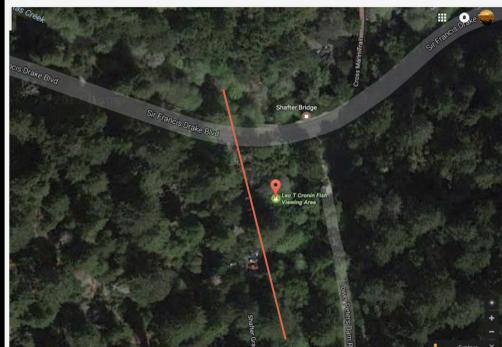
The population of coho salmon in Northern California has been decreasing throughout the years leading them to be classified as a threatened species. Coho salmon thrive in creeks with unobstructed water flow, adequate oxygen, streamside shade, access to spawning gravels with a low fine sediment component, and cool water. Dutch Bill Creek lacks some of these essential creek traits hindering salmon spawn. However, the organization network, Salmon Protection and Watershed Network (SPAWN) have found success in salmon returning and spawning.

## Methods

- What makes a suitable habitat for coho salmon survivability?
- We looked to compare a healthy coho salmon creek and its characteristics to Dutch Bill Creek.
- We surveyed both Lagunitas Creek and Dutch Bill Creek by looking for specific characteristic traits that are essential for coho salmon spawning.

## Location

Lagunitas Creek



Dutch Bill Creek



— Where we investigated

## Results

|                                | Dutch Bill Creek | Lagunitas Creek |
|--------------------------------|------------------|-----------------|
| Rooftop water catchment system | ✗                | ✓               |
| Wood Debris                    | ✓                | ✓               |
| Fish monitoring stations       | ✓                | ✓               |
| Canopy coverage                | ✗                | ✓               |



## Discussion

- Our findings are built off of what is already known about watershed restoration and focuses those plans to best fit Dutch Bill Creek.
- The implementation of a rooftop water catchment system would be to avoid runoff from residential rooftops into Dutch Bill Creek.
- The implementation of more canopy coverage along Dutch Bill Creek by planting more trees will help in protecting coho salmon.

## Conclusions

In conclusion, we believe that Goldridge RCD needs to work with community partners in implementing a rooftop water catchment system to avoid runoff in the creek, create more canopy coverage to help protect the salmon, and create more monitoring stations to know where they should focus attention in Dutch Bill Creek.

## References

- Dolloff, C. A. (1986). Effects of stream cleaning on juvenile coho salmon and Dolly Varden in southeast Alaska. *Transactions of the American Fisheries Society*, 115(5), 743-755.
- Miller, G. (2010). In central California, coho salmon are on the brink. *Science*, 327(5965), 512-513.

## Acknowledgements

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