# ACFL Forest Monitoring Program

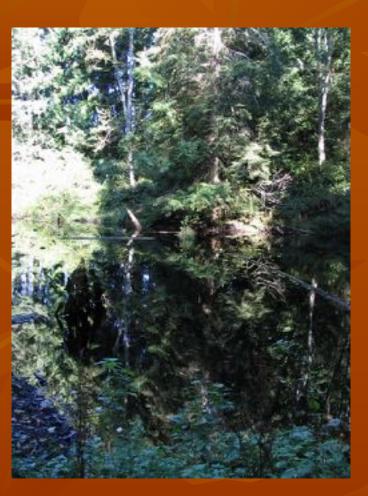
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Transition Fidalgo
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# **Anacortes Community Forest Lands Monitoring Program**

#### Background

- Anacortes Community Forest Lands (ACFL) 2950 acres located on Fidalgo Island
- 50 miles of trails traveling thru diverse ecosystems
  - Lake shore
  - Wetlands
  - Old growth forest ancient firs and cedar
  - Mountain top
- Owned/managed by City of Anacortes

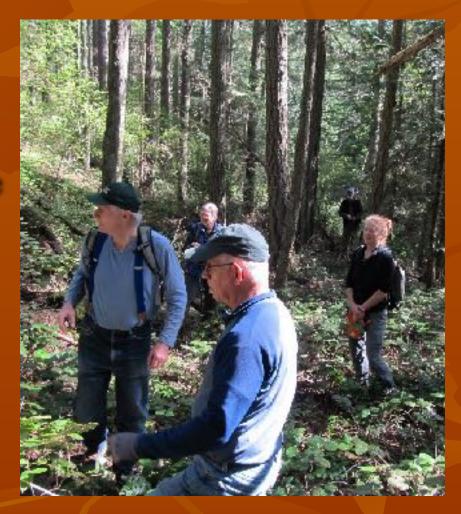
# Forest Monitoring Program



- Primary mission- baseline and long term survey of forest health
- Signed MOU with City 8/2018
- Forest Monitoring Program started 2019
  - Develop & define projects
- 2022 transitioned to sustainable, long term program

# Program Objectives

- Understand how forests are changing through time
  - Sound monitoring practices
- Opportunity to engage/educate community through citizen science
  - Volunteers gain hands on understanding of forest eco-systems
- Provide scientists, forest managers, City with data and projections of forest health

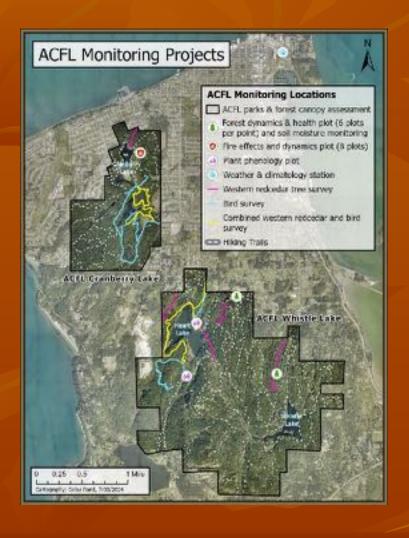


# Program Framework

- Citizen Science program- designed to survey forest ecosystem
   Science based monitoring methods
   Program led by internationally recognized forest scientist

  - Greater scope possible

# 8 Forest Monitoring Projects



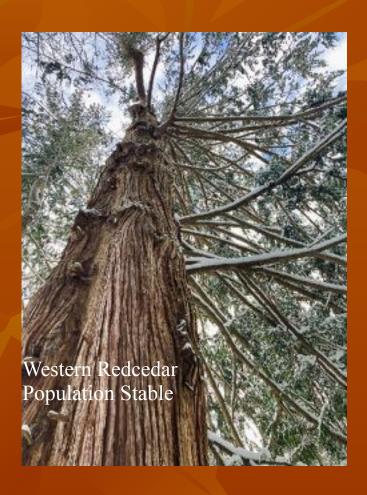
- Forest Plot Studies
- Western Redcedar Mortality Surveys
- Tree/Shrub Phenology
- Canopy Assessment
- Fire Effects & Recovery Monitoring
- Bird Populations
- Weather & Climate
- Soil Moisture

## **Project Status**

- 2024 Annual Report documents progress and results
  - https://www.transitionfidalgo.org/ annual-reports
- Sixth year of monitoring
- Data analysis producing trends
  - Subject to change over time
- Data archived on-line- Hired data manager



# Interesting Observations





Little Cranberry Lk Fire 2016



Little Cranberry Lk 2024

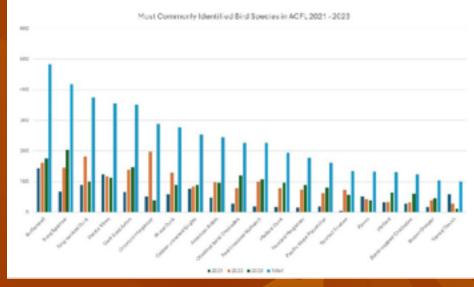
#### **Trends**



- Since 2019 western redcedar health stable
- 2016 heat dome suspected of triggering die off

#### Birds We've Seen

A common question on the minds of forest hikers is: who are the birds that I see/hear in the forest? Bird monitoring teams have compiled a record of who they've heard and seen over the past 3 years. Below you can see our most common birds and how many are coming to visit or live in the ACFL.



#### Other Observations & Trends

- Significantly greater diversity in burn zones
  - 58 species- burned
  - 11 species- unburned
- Annual lifecycle events are occurring earlier in spring
- Duration of soil moisture drought expected to impact seedlings



#### **Our Volunteers**

- Over 70 citizen science volunteers
- Majority of our volunteers since 2019
- Developed strong ownership of their projects
- Technical guidance from lead scientist vital



#### Into the Future

- Concerned about durability of Program
  - Working to start pipeline of new volunteers
  - Develop backup plans for lead positions
  - Need backup for program management & scientist
- Move into Phase 3- look outward
  - Continue developing long term partnerships
  - Expand use of data with other organizations
  - Develop more financial support
  - Reduction and analyses of long term data sets