



WASHINGTON STATE DEPARTMENT OF  
**NATURAL RESOURCES**

# *The Ins and Outs of a Well- Written Reforestation Contract*

**Zak Thomas**

Silviculture Operations Manager

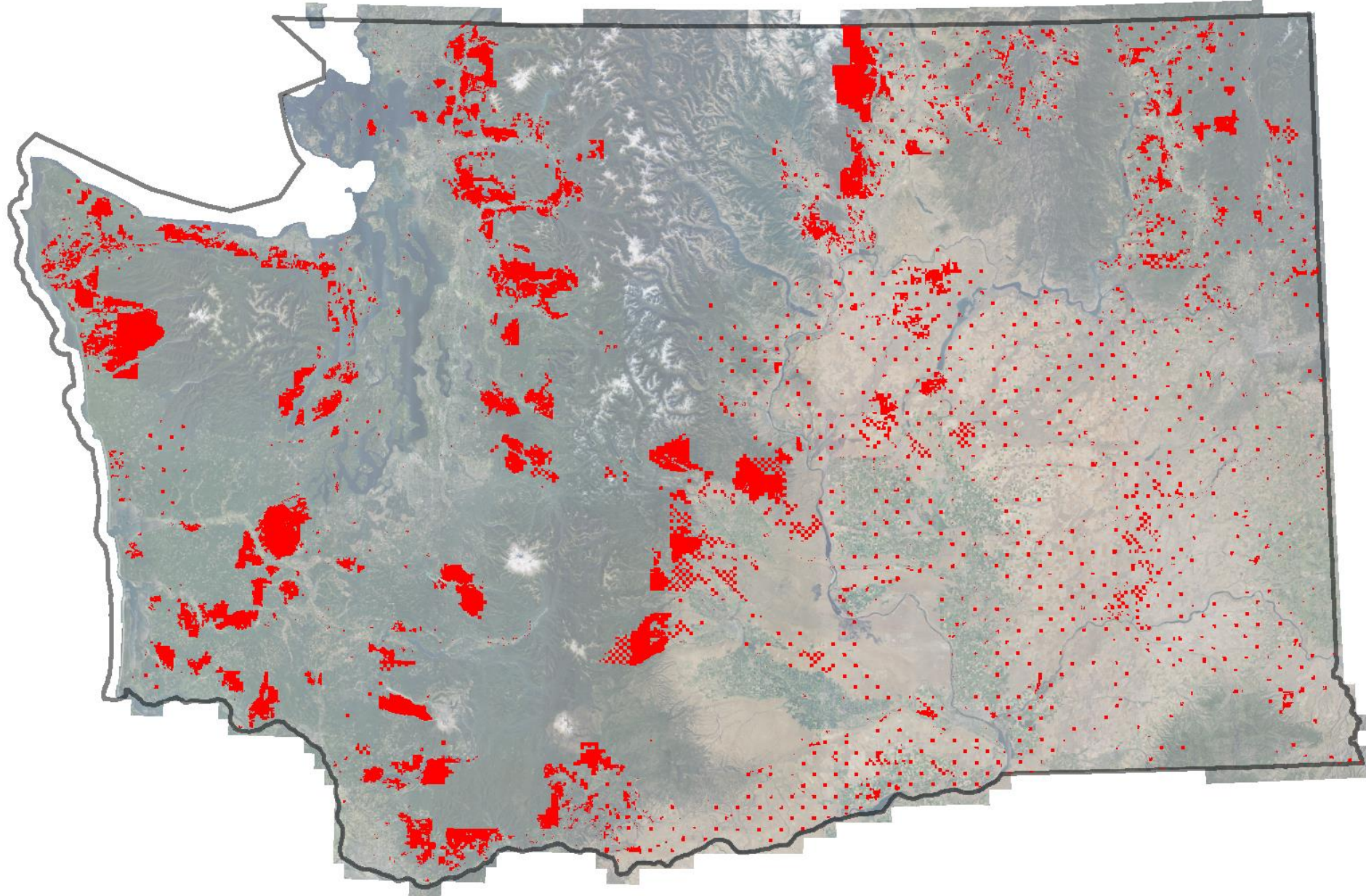
Washington State Dept. of Natural Resources

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1.  
**WA DNR Silviculture at a glance**

Washington State DNR manages over 2-million acres of forest land





**\$5-million**

invested in  
young stand  
management  
contracts

**40,000+**

**acres** of  
contract  
work

**60+**

**contracts**

**~25**

**contractors**

A decorative network diagram in the top-left corner, consisting of various sized nodes (some solid grey, some hollow white with grey outlines) connected by thin grey lines. The nodes are arranged in a complex, interconnected pattern.

## 2. The basics



# *Anatomy of a well-written reforestation contract*

General clauses

Activity specifications

Compliance mechanism

Payment determination



*Anatomy of a well-written reforestation contract*

**The most important parts  
of your contract are the  
signature lines**



# It starts with the solicitation process

The screenshot shows the website for the Washington State Department of Natural Resources, specifically the 'Silviculture on State Lands' page. The header includes the department's logo and name, a search bar, and a navigation menu with categories like 'PROGRAMS AND SERVICES', 'ABOUT', 'MANAGED LANDS', 'EMPLOYMENT', and 'COVID-19 INFO'. A sidebar on the left lists various forest resources. The main content area features a large heading for 'Silviculture on State Lands', a sub-heading for 'GROWING STATE FORESTS THROUGH STATE TRUST LANDS FOREST MANAGEMENT', and a paragraph explaining the department's goals. Below this is a section for 'Silviculture Contracts' with a table of current invitations to bid. A right-hand sidebar provides contact information for several staff members.

**WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES**  
HILARY S. FRANZ | COMMISSIONER OF PUBLIC LANDS

Search here... Translate

PROGRAMS AND SERVICES ABOUT MANAGED LANDS EMPLOYMENT COVID-19 INFO

Home | **Forest Resources**

Earth Sciences

**Growing State Forests**

Habitat Conservation

Olympic Experimental State Forest

Sustainable Harvest Calculation

Webster Forest Nursery

## Silviculture on State Lands

GROWING STATE FORESTS THROUGH STATE TRUST LANDS FOREST MANAGEMENT

We use silviculture activities to achieve a variety of agency objectives. By promoting forest health and productivity, increasing revenue, and sustaining wildlife habitat, these activities play a key active role in keeping Washington's forested state trust lands vibrant and healthy.

### Silviculture Contracts

Silviculture contracts fall under several categories: Tree Planting, Pre-Commercial Thinning, Site Preparation, and Conifer Release. If you are interested in bidding on silviculture contracts, please browse this information to find out about the bidding process and current and anticipated contracts open for bid.

**New contracts in green: updated November 1, 2022**

**Current Invitations to Bid** - Click on bid number to open the draft contract document.

| Silviculture Contracts                        |            |                 |
|---|------------|-----------------|
| Contract Type                                 | Contract # | Bid Close Date  |
| Site Preparation Ground Herbicide - NW Region | 3069       | July 19, 2022   |
| Conifer Release Ground Herbicide - Oly Region | 3073       | August 16, 2022 |
| Conifer Release Ground Herbicide - Oly Region | 3074       | August 16, 2022 |

### CONTACT

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**Brian Williams**  
Intensive Management



*It starts with the solicitation process*



# *It starts with the solicitation process*

- **More bidders = lower prices**



# *It starts with the solicitation process*

- More bidders = lower prices
- **Things that influence bidder interest**
  - Type of work
  - Contract size
  - Term/seasonality
  - Regional contractor demand
  - Geography



# *It starts with the solicitation process*

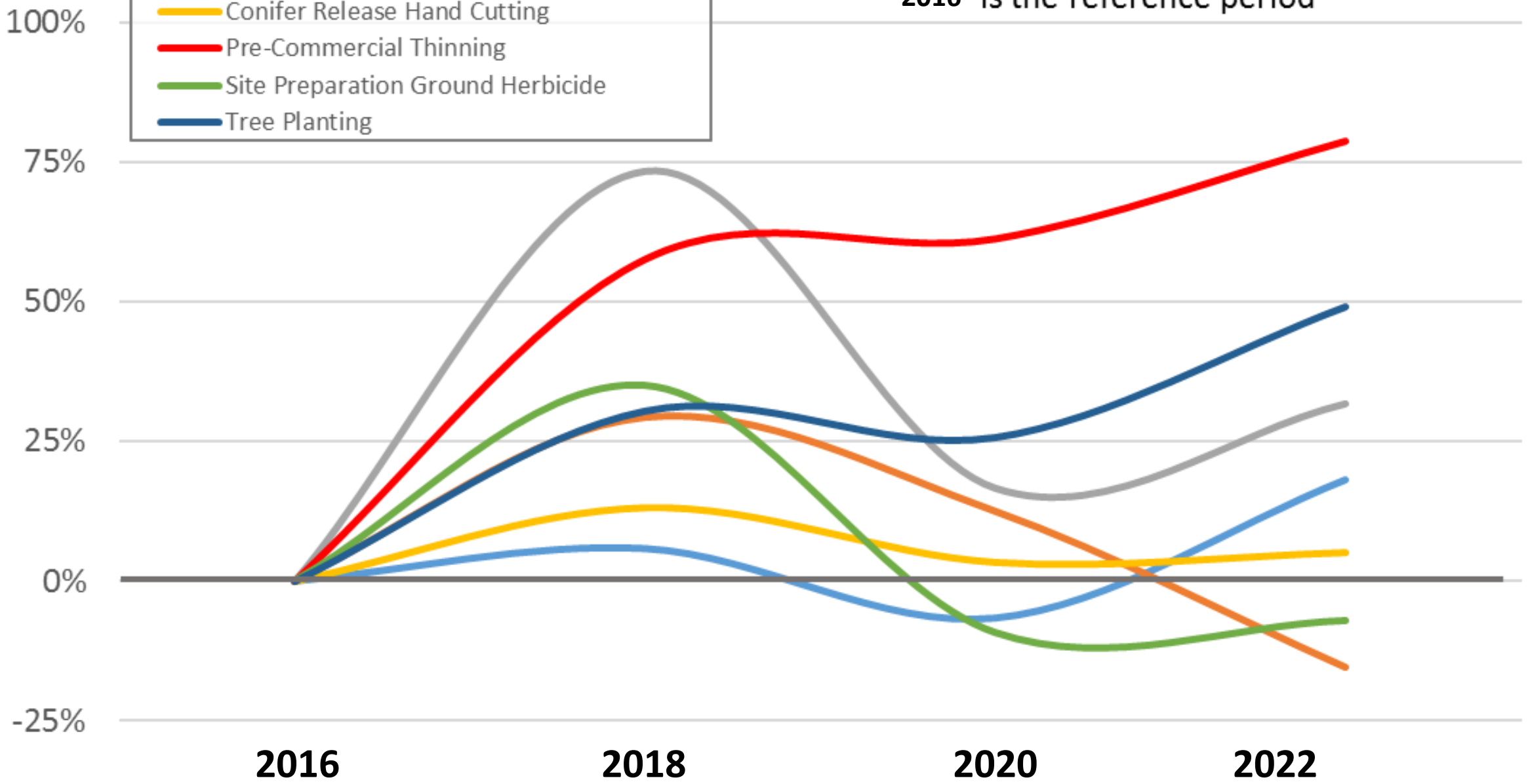
- More bidders = lower prices
- Things that influence bidder interest
  - Type of work
  - Contract size
  - Term/seasonality
  - Regional contractor demand
  - Geography
- **Before signatures its good to verify ability**
  - Check references
  - Do they have enough workers?
  - Were they able to view the units?
  - Are they working on other contracts?
  - Have they done this type of work before?
  - Have they worked in this forest type?



# Percent change in per acre cost of westside silviculture contracts since 15-17

2016 is the reference period

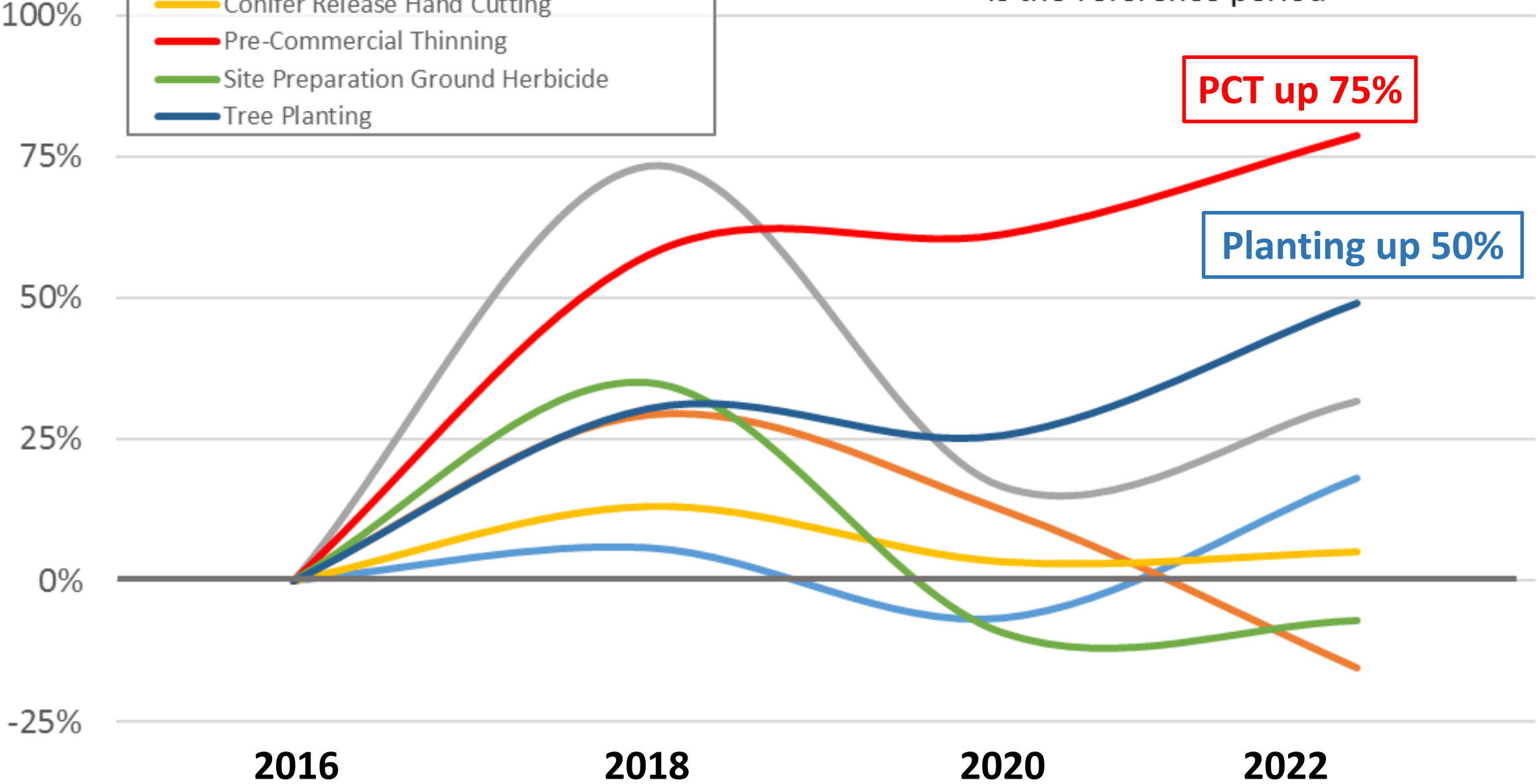
- Aerial Herbicide
- Conifer Release Ground Herbicide
- Conifer Release Ground Herbicide - maple
- Conifer Release Hand Cutting
- Pre-Commercial Thinning
- Site Preparation Ground Herbicide
- Tree Planting



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3.

Some ideas for your next contract



*If it is not in the contract then it is up for debate – if it is something worth worrying about add it to the contract*



# *Considerations for your next reforestation contract*

- A contract is a means to mitigate risk...(legally) protect yourself and your resources



# *Considerations for your next reforestation contract*

- A contract is a means to mitigate risk...(legally) protect yourself and your resources
  - Indemnification
  - Insurance
  - Work with licensed contactors
    - Farm labor contactors certified for reforestation work
    - Pesticide licenses



# *Considerations for your next reforestation contract*

- **Think about the contact term**



# *Considerations for your next reforestation contract*

- Think about the contact term
- **Specify the order which units will be completed**



# *Considerations for your next reforestation contract*

- Think about the contact term
- Specify the order which units will be completed
- **Give yourself the ability to modify/cancel contact, and stop operations at any point**



# *Considerations for your next reforestation contract*

- Think about the contact term
- Specify the order which units will be completed
- Give yourself the ability to modify/cancel contact, and stop operations at any point
- **Define what is an acceptable crew size**



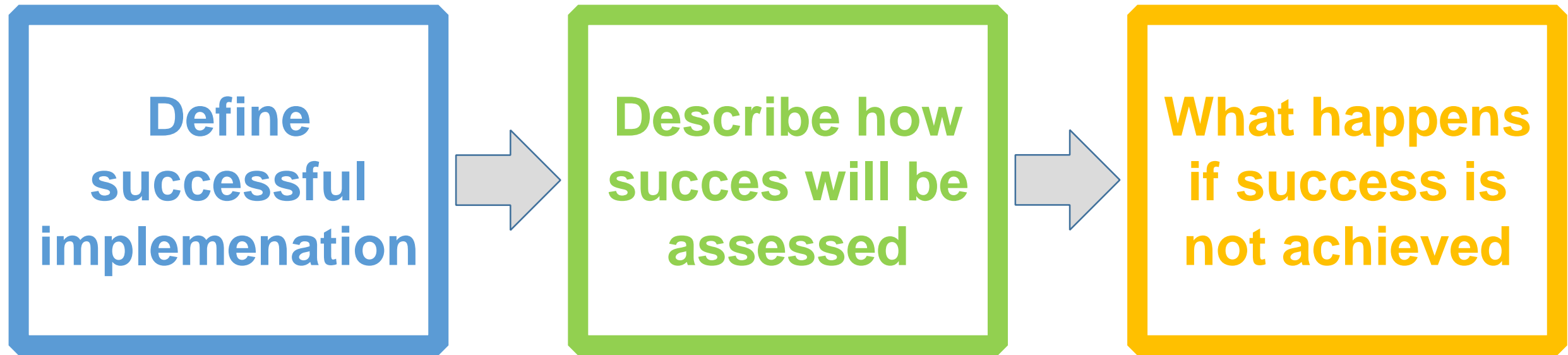
# *Considerations for your next reforestation contract*

- **A clear implementation plan**





A simplified model for an implementation plan in a contract





# *Considerations for your next reforestation contract*

- **A clear implementation plan**



# *Considerations for your next reforestation contract*

- A clear implementation plan
- **Avoid ambiguous or dead-end language**



# *Considerations for your next reforestation contract*

- A clear implementation plan
- Avoid ambiguous or dead-end language
- **Performance security**



# *Considerations for your next reforestation contract*

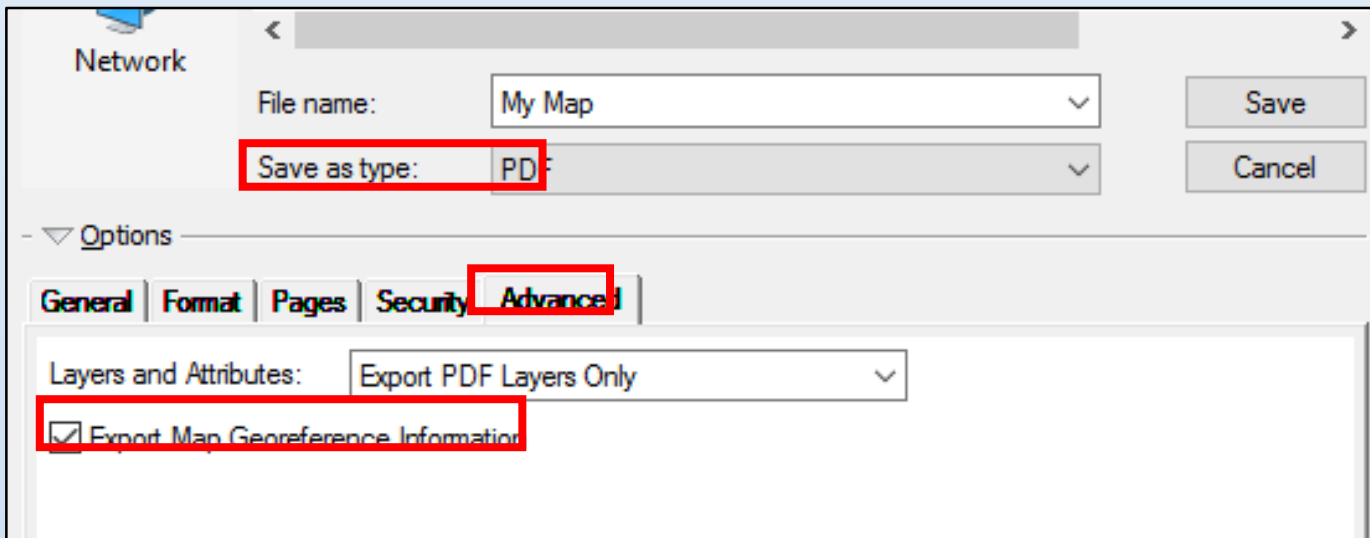
- A clear implementation plan
- Avoid ambiguous or dead-end language
- Performance security
- **Pre-work conference**



# A good map is key

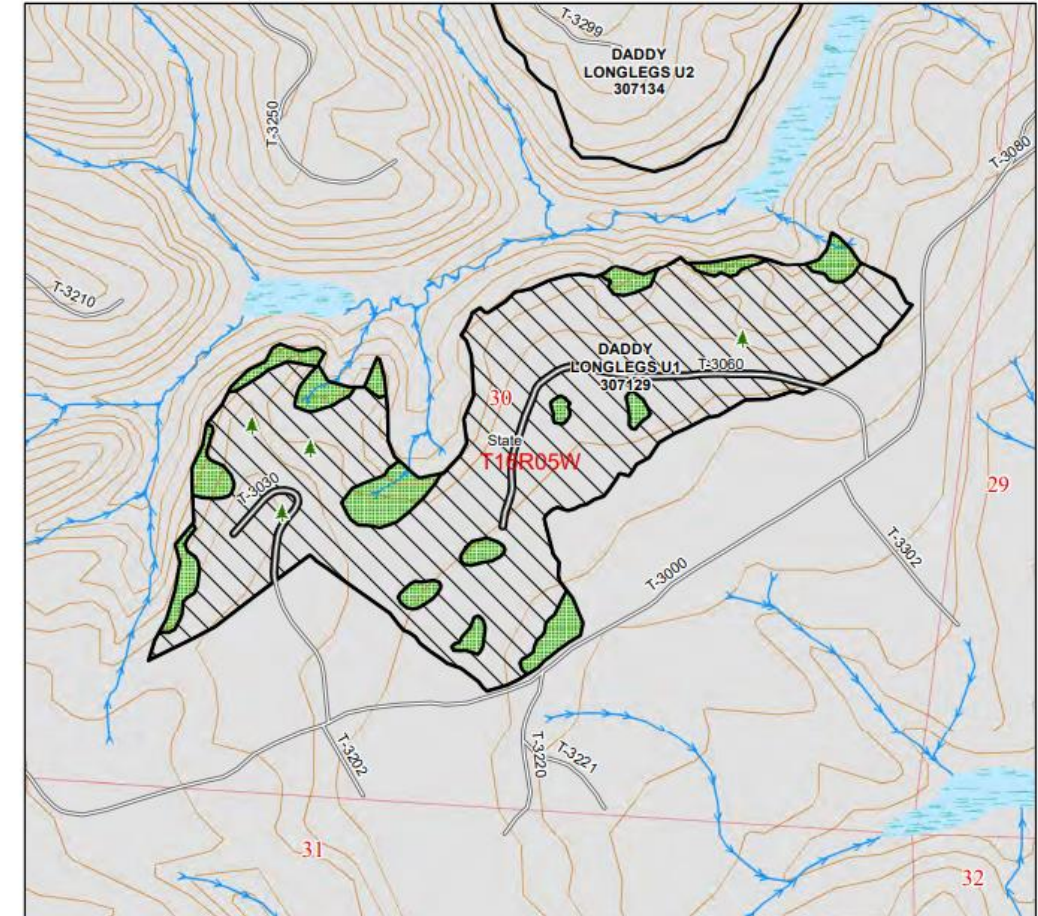


# AVENZA MAPS



## UNIT MAP

Activity Type: Tree Planting      Pacific Cascade Region      Bid No. 3094  
Work Unit: Lewis      Treatment Acres: 75      Unit No. 14  
Unit Name: DADDY LONGLEGS U1



*Some activity specific  
considerations*

# *Some activity specific considerations*

- Tree Planting
  - **Handling of seedlings and general care of planting stock**



# *Some activity specific considerations*

- Tree Planting
  - Handling of seedlings and general care of planting stock
  - **Define what a properly planted seedling looks like**





# *Some activity specific considerations*

- Tree Planting
  - Handling of seedlings and general care of planting stock
  - Define what a properly planted seedling looks like
  - **Weather conditions**



# *Some activity specific considerations*

- Tree Planting
  - Handling of seedlings and general care of planting stock
  - Define what a properly planted seedling looks like
  - Weather conditions
  - **Minimum and average spacing**



# *Some activity specific considerations*

- PCT
  - **Thinning method**



# *Some activity specific considerations*

- PCT
  - Thinning method
  - **How to select trees to leave/take?**



# *Some activity specific considerations*

- PCT
  - Thinning method
  - How to select trees to leave/take?
  - **Stump height**



# *Some activity specific considerations*

- PCT
  - Thinning method
  - How to select trees to leave/take?
  - Stump height
  - **Hangers**



# *Some activity specific considerations*

- PCT
  - Thinning method
  - How to select trees to leave/take?
  - Stump height
  - Hangers
- **Allow for some level of variability around your target**



# *Some activity specific considerations*

- Herbicide
  - **Mix and target vegetation**





# *Some activity specific considerations*

- Herbicide
  - Mix and target vegetation
  - **Batch capacity and method**



# *Some activity specific considerations*

- Herbicide
  - Mix and target vegetation
  - Batch capacity and method
  - **Weather conditions**



# *Some activity specific considerations*

- Herbicide
  - Mix and target vegetation
  - Batch capacity and method
  - Weather conditions
  - **Where not to spray**



# *Some activity specific considerations*

- Herbicide
  - Mix and target vegetation
  - Batch capacity and method
  - Weather conditions
  - Where not to spray
  - **Agitation**





*If it is not in the contract then it is up for debate – if it is something worth worrying about add it to the contract*

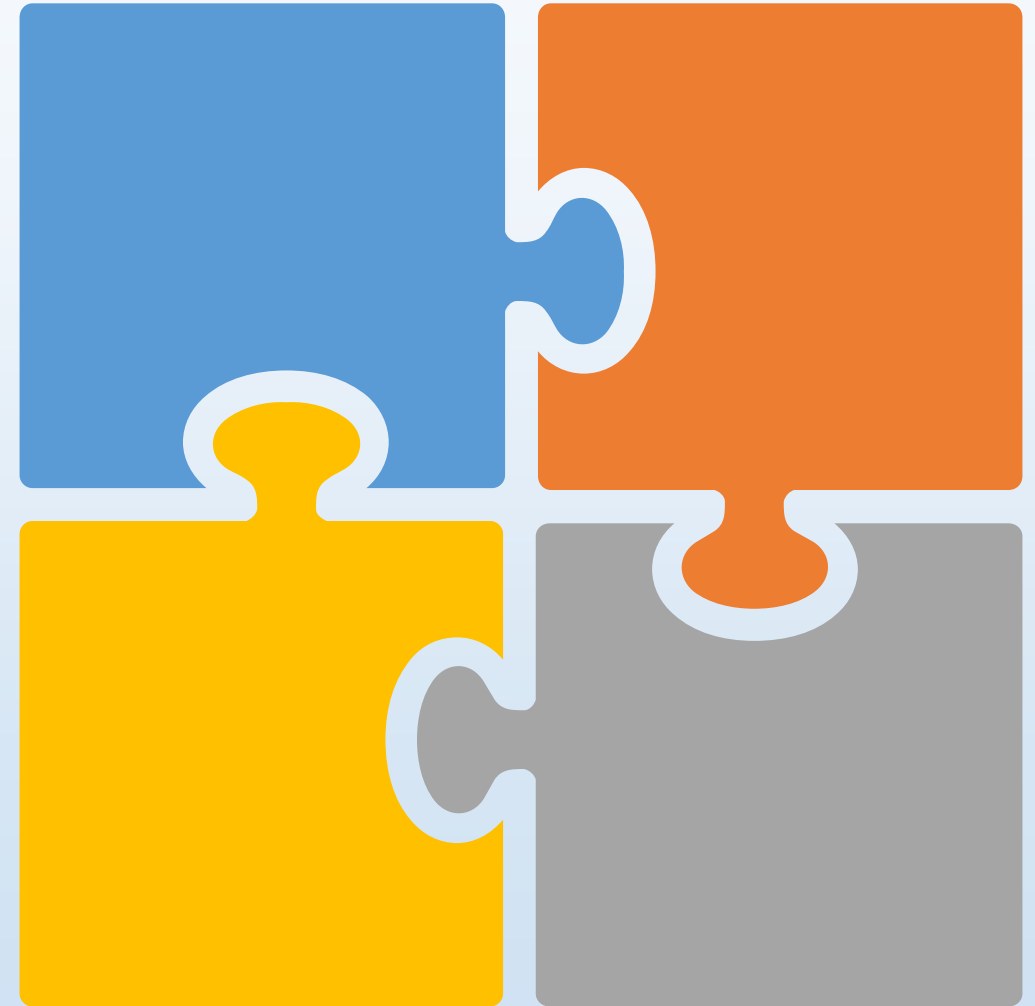
# *Recommendations for larger contacting programs*

- **Invest in maintaining the diversity of your contactor pool**



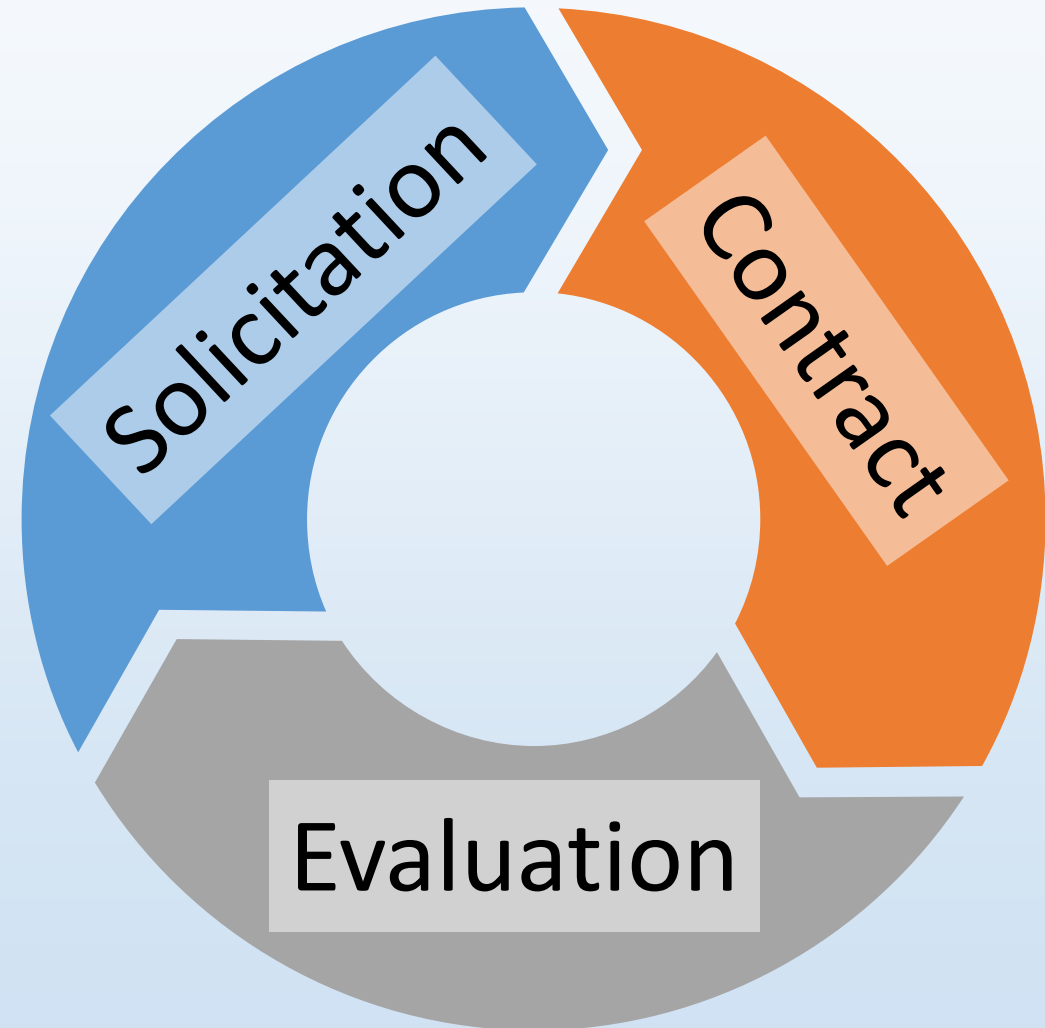
# *Recommendations for larger contacting programs*

- Invest in maintaining the diversity of your contactor pool
- **Maximize the size of your network within your organization**



# *Recommendations for larger contacting programs*

- Invest in maintaining the diversity of your contactor pool
- Maximize the size of your network within your organization
- **Have an evaluation system and feedback loop**





# *Contact administration is critical!!*

- You can have the best contact ever but it doesn't really matter if there is not effective contract compliance

## Compliance Report

| Item                    | Value       |
|-------------------------|-------------|
| ...Sample Weighted....  |             |
| Plots Measured          | 7 Plots     |
| Plantable Spots         | 40.6 Spots  |
| Trees Measured          | 41.0 Trees  |
| Compliant Trees         | 37.0 Trees  |
| Non-compliant Trees     | 4.0 Trees   |
| % Damaged Trees         | 9% Trees    |
| Measured Trees Per Acre | 293 TPA     |
| Performance Rating^     | 91% Passing |



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**WDTCS – What  
does the  
contract say**





CAN YOU HAVE ANOTHER LOOK AT THIS? THERE'S STILL A FEW SENTENCES PEOPLE MIGHT UNDERSTAND...

