

# Conservation Plant Needs Assessment for Washington State Conservation Districts

Developed by the WACD Plant Materials Taskforce

October 14, 2024

**Introduction:** Conservation Districts in Washington State have expressed frustration over a lack of available conservation-grade plant material for conservation projects. The Plant Materials Taskforce was formed from the adoption of Resolution 2023-11. The goal of the Plant Materials Taskforce is to explore ways of providing additional native plants to conservation districts.

The Taskforce is made up of 7 Conservation District Supervisors and Managers/Executive Directors: Harold Crose, Columbia Basin CD; Sarah Moorehead, Thurston CD; Mike Mumford, Pend Oreille CD; Dan Richardson, Underwood CD; Jeff Schibel, Lincoln County CD; Megan Stewart, Asotin County CD; David Vliet, Kitsap CD. The Workgroup's membership also includes 2 Technical Advisors, Jim Brown, WACD's Director of Nursery Operations at the PMC, and Mark Clark, an Olympia farmer, with expertise in the nursery industry. The Workgroup receives staff support from Heather Wendt, WACD's Director of Development and Engagement. Other participants include B'Elanna Rhodehamel, SCC Riparian Plant Propagation Program Manager, and Tom Salzer, WACD Executive Director.

**Background:** The Plant Materials Taskforce began meeting in January of 2024. The Taskforce explored the current use and understanding of the services provided by the WACD Plant Materials Center. In addition, the Taskforce explored the needs of CDs regarding the species, stock type, and timing of conservation plantings across the state. Current government programs to support CD plant material needs were also reviewed.

**Plant Materials Survey Overview:** In February of 2024, the Plant Materials Taskforce surveyed conservation districts to determine their needs around conservation plant materials. All 45 Conservation Districts responded to the survey.

## Stock Type

Districts were surveyed on the stock types they use. Figure 1 shows the total number of responses by stock type. Bareroot and plugs were the predominant material used with 74% of respondents indicating they used this stock type. Live stakes and potted plants were third and fourth respectively with 62% and 53% of respondents indicating they used this stock type.

Figure 2 shows stock type use by area. All areas use all 4 stock types for their various projects with the Northwest region utilizing the most bareroot stock and the Southeast region utilizing the least amount of bareroot stock.

Figure 1 – District Plant Material Types Used

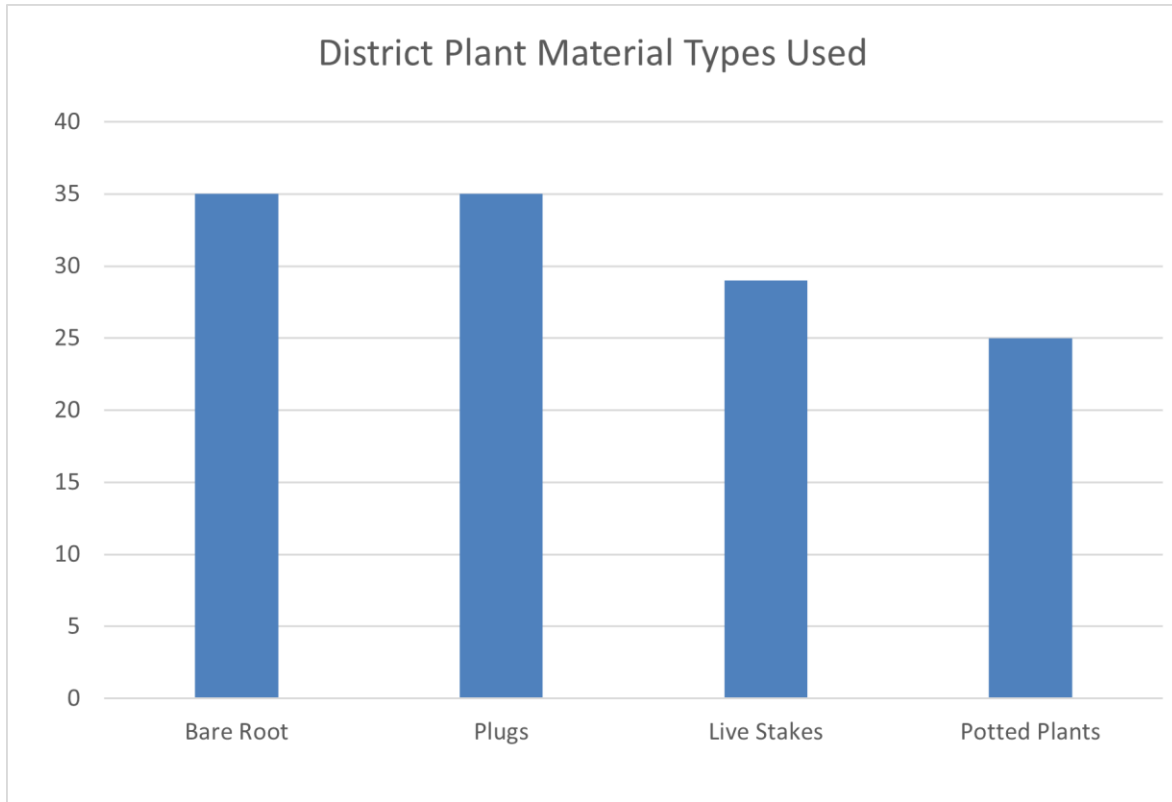
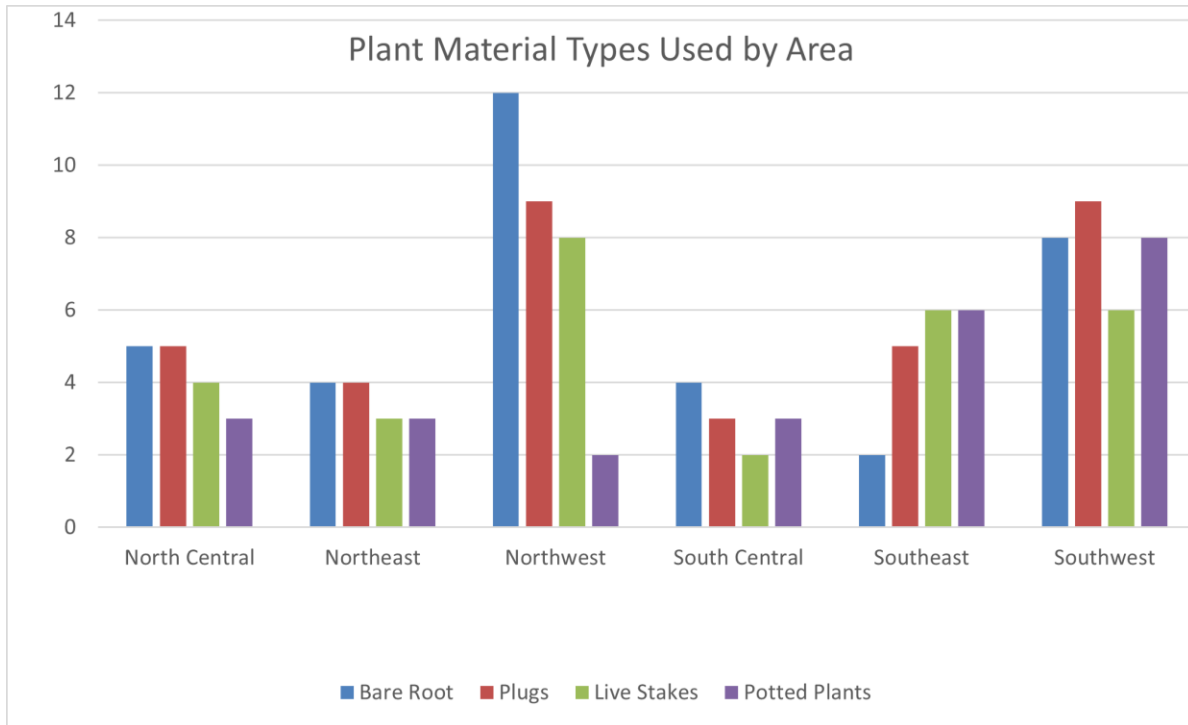


Figure 2 – Plant Material Types Used by Area



## Planting Times

Figure 3 below illustrates that 77% of respondents plant in the fall. Figure 4 breaks the planting times down by area. The western regions of the state can plant in the winter due to the warmer weather conditions.

Figure 3 – CD Planting Times

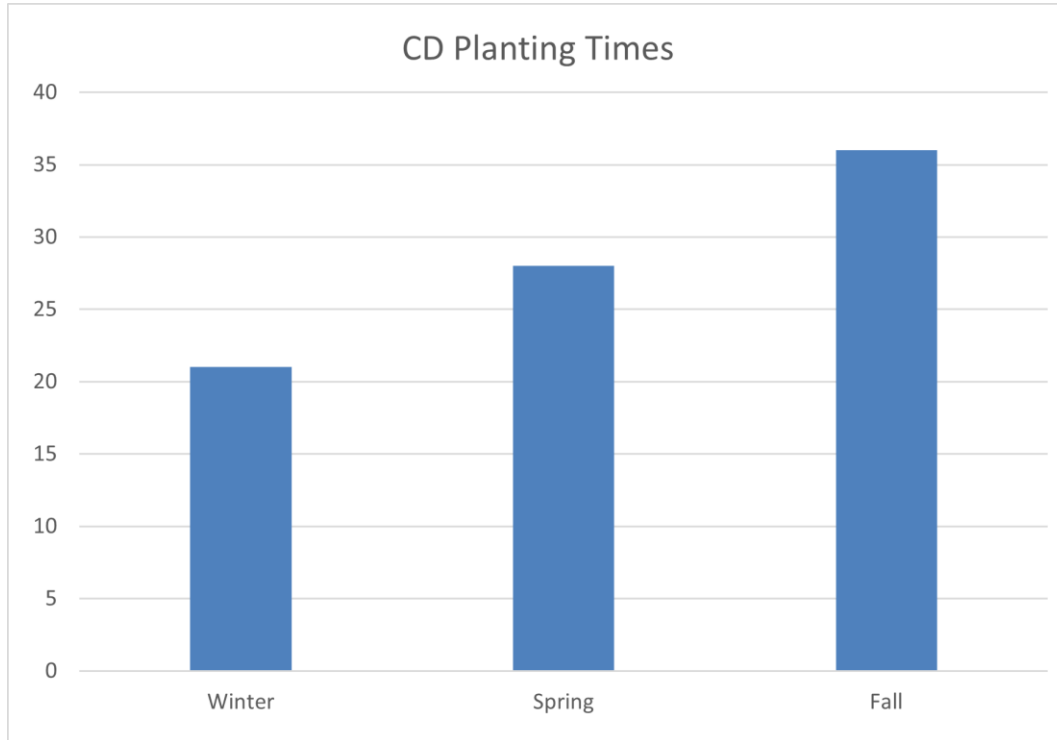
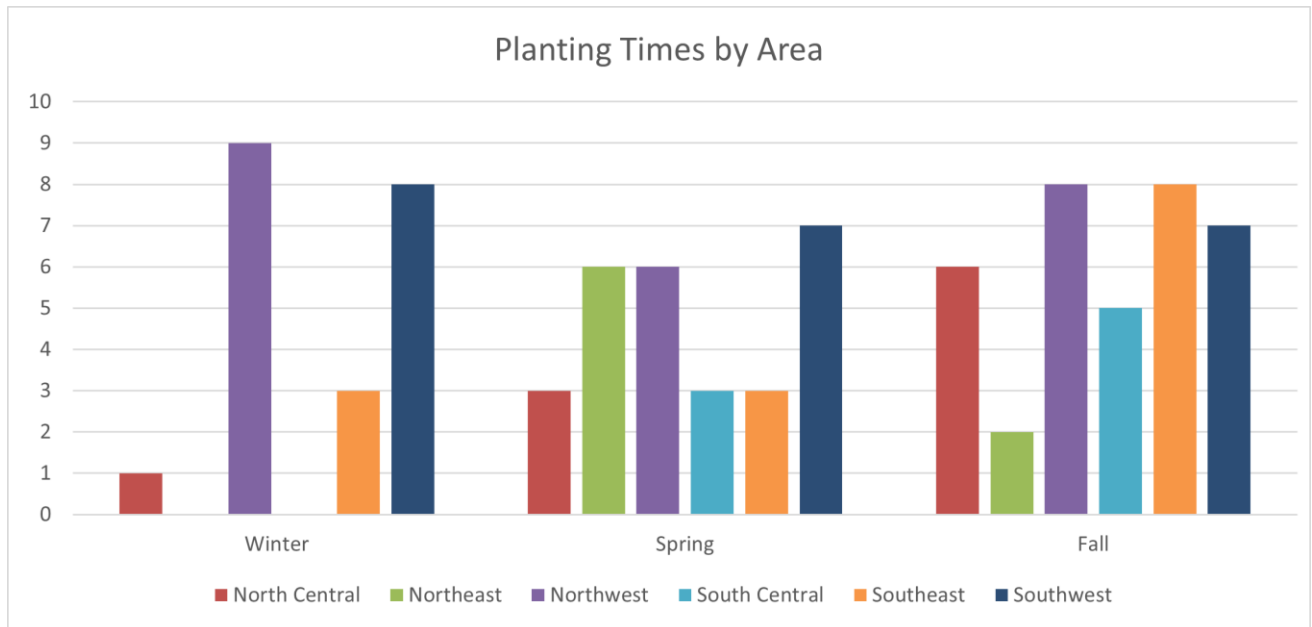


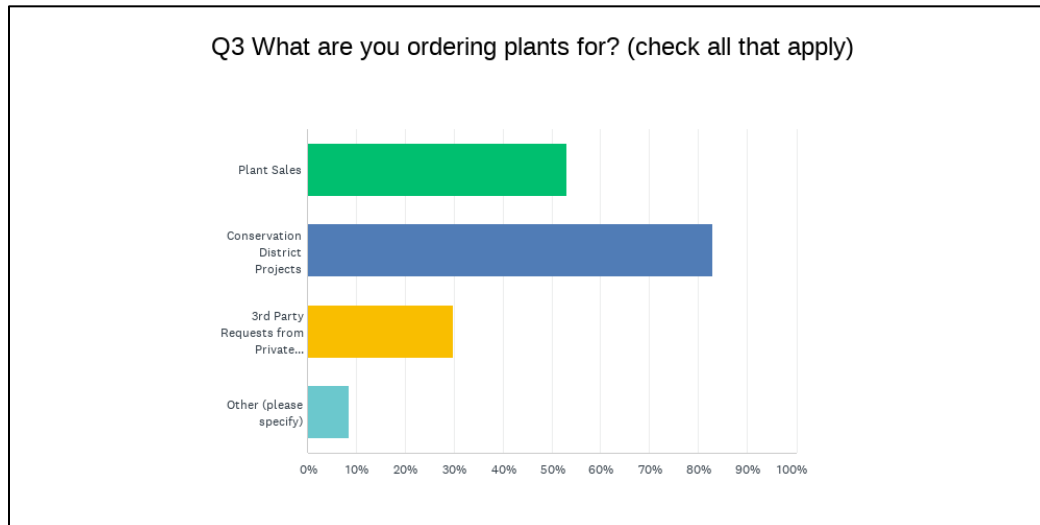
Figure 4 – Planting Times by Area



### Why are CDs Purchasing Plants?

The Taskforce also explored why CDs purchase plants. 83% of respondents indicated they were buying plants for conservation district projects, 53% purchased plants for plant sales, and 30% purchased plants to fulfill third-party requests from landowners. Districts also buy plants for Arbor Day tree giveaways and public emergency mitigation requests among other reasons (See Figure 5).

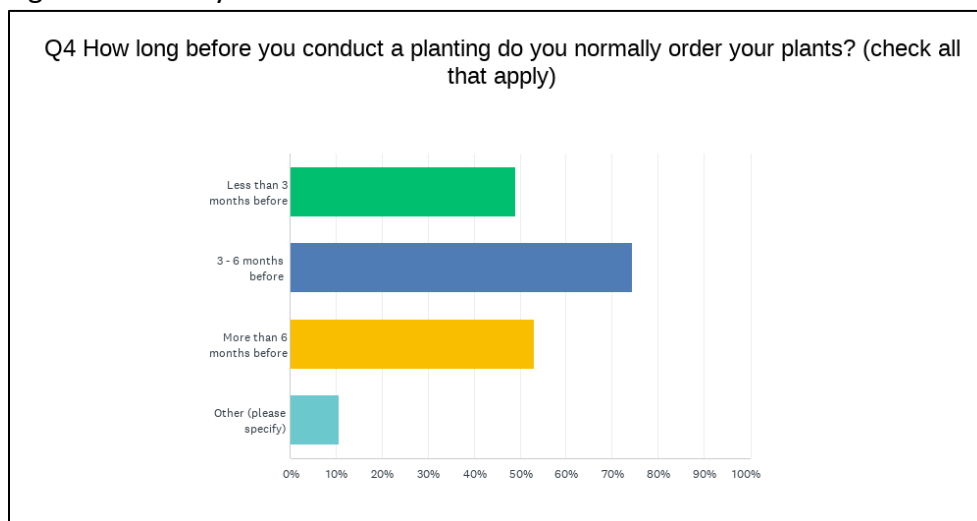
Figure 5 – Survey Question 3



### Ordering Timeframes

The majority of respondents, 74%, order plant material 3 – 6 months in advance of their projects. 53% order plants more than 6 months in advance and 49% order plants less than three months in advance (See Figure 6). One of the challenges expressed by districts is short grant timeframes, (2 – years or less), which prevents them from entering into contracts or longer-term purchasing agreements which could ensure greater plant availability. It takes 2 – 3 years to grow conservation-grade stock which provides an additional limitation to the immediate availability of plants.

Figure 6 – Survey Question 4



## CD Plant Needs

The Taskforce also explored if CDs purchased plants from the WACD PMC. The survey showed that 1 CD purchased all of their plants from the PMC, 6 did not purchase any plants from the PMC, and 38 CDs purchased some of their plants from the PMC (See Figure 7). For those CDs that do order some of their plants from the PMC, 64% reported they still needed to order from other nurseries to meet their need for containerized stock. 59% indicated they needed species that the PMC did not provide and 33% indicated that they were able to procure plants that were cheaper somewhere else. Other reasons/needs expressed included availability at the time of ordering, a preference for planting in the fall before the PMC harvests its plants, and more local plant sources/species (See Figure 8).

Figure 7 – Survey Question 6

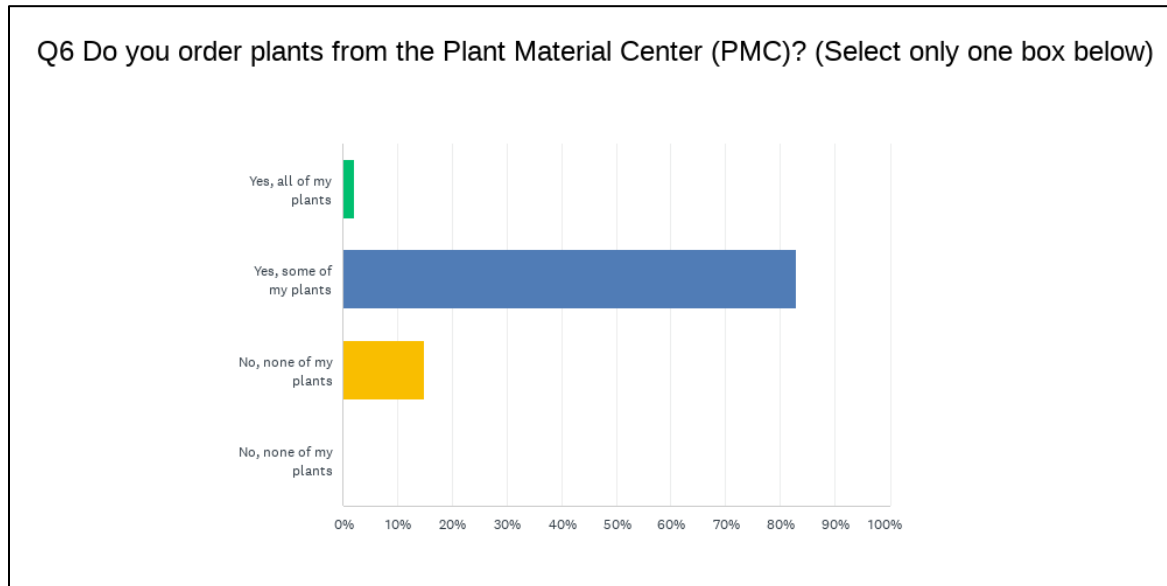


Figure 8 – Survey Question 21



## Additional Species Desired from the PMC

Table 1 below summarizes plants CDs would like to see made available from the PMC. Several species are currently available from the PMC as either gravel bed or bareroot stock or they are offered via brokering from other nurseries. The exceptions are shrub-steppe species, wetland/coastal herbaceous plants, and containerized stock.

Table 1 – Summary of species districts would like to see the PMC grow.

Plants Requested	Currently Offered Via Gravel Beds	Currently Offered Via Bareroot	Currently Offered Via Brokering	Can be Brokered Upon Request	Other Comments
Conifer Plugs			X	X	
Salal			X	X	Greenhouse item
Rocky Mt. Maple, Acer Glabrum		X - WW, EW, OR			
Bitter Cherry, Prunus emarginata		X - WW, EW, OR			
Greene's Mt. Ash, Sorbus scopulina					Unknown market demand
SW WA Prarie Perennials					Herbaceous material
Emergent Wetland Species					Herbaceous material
Creeping Oregon Grape, Mahonia repens					Greenhouse item
Evergreen huckleberry, Vaccinium ovatum			X	X	Greenhouse item
Western sword fern, Polystichum munitum			X	X	Greenhouse item
Deer fern, Blechnum spicant			X	X	Greenhouse item
Maidenhair Fern			X	X	Greenhouse item
Sweet Gale, Myrica gale					Herbaceous material
Pacific Wax Myrtle, Myrica californica					Cold Hardiness issue this far north
Pacific Yew					Greenhouse item
Beaked Hazelut		X - OR			
Orange Honeysuckle			X	X	Greenhouse item
Black Cap Raspberry					Unknown market demand
Kinnikinnick			X	X	Greenhouse item
Red Huckelberry					import restrictions
Rhododendron Plugs			X	X	Greenhouse item
Strawberry			X	X	Greenhouse item
Beargrass					Herbaceous material
Sea Thrift					Herbaceous material
Camas Bulbs					Herbaceous material
Paper Birch, Betula papyrifera		X - WW			
Currant species, Ribes spp.		X - WW			
Serviceberry, Amelanchier alnifolia	X	X - WW,EW, OR			
Chokecherry, Prunus virginiana		X - EW			
Douglas spiraea, Spirea douglasii	X	X - WW			
Sagebrush					Not acclimated to W. WA
Rocky Mt. Juniper					complex germination requirements
Shrub-steppe Species					Not acclimated to W. WA
Wapato, Sagittaria - bareroot					Herbaceous material
Cattail - bareroot					Herbaceous material
Tule - bareroot					Herbaceous material
Pacific Yew					Greenhouse item
Austrian Pine - Plug 1 - Lincoln Co. Seed Source					Contract grow (non-native)
Willow - bareroot					Livestakes available
Eastern WA species					Grow: Black hawthorn, Blue elderberry, Mallow ninebark, Mock orange, Snowbrush
Eastern WA species					Grow: Quaking aspen, Redosier dogwood, Redstem ceanothus, Snowberry, Woods' rose

## Brokering & Multi-year Contract Growing

Brokering was of interest to 30 out of 47 respondents depending on the final cost of the plant material. 33 out of 47 respondents expressed an interest in multi-year contracts if the issue of long-term funding for projects could be resolved.

## Summary of Strategies

**Strategy 1** focuses on additional education and outreach to conservation districts on the resources that are currently available through the Plant Materials Center. With constant staff turnover at the district level, it is hard for them to know what services are already available to them and how to best access those resources. An Open House and a User's Manual have already been implemented. WACD will reach out to CDs to determine if planting videos already exist or if those need to be developed.

Recommended Monitoring – Work with the PMC to track CD ordering to see if outreach efforts have impacted how and when CDs procure plants. Consider surveying to ascertain if CDs feel like they are now more knowledgeable about PMC resources.

**Strategy 2** focuses on increasing plant availability through brokering plants for CDs from other nurseries and providing longer-term contracts to those CDs who know their plant needs further out. This strategy also creates a pathway for CDs to request new species to be considered for production at the PMC.

Recommended Monitoring – Work with the PMC to track CD orders to see if there is an increase in brokering, contract growing, or new species development.

**Strategy 3** focuses on WACD creating an east side PMC as a standalone operation or WACD working in partnership with a CD to grow conservation-grade containerized plants. This strategy requires the largest financial investment and may be best approached through a pilot project to assist in determining its feasibility.

Recommended Monitoring – This will be determined once the scope of the proposal has been developed.

**Strategy 4** focuses on creating partnerships with the private sector to grow conservation-grade containerized plants. WACD may want to consider a pilot project to assist in determining the feasibility of this strategy.

Recommended Monitoring – This will be determined once the scope of the proposal has been developed.

**Strategy 5** focuses on supporting funding requests by CDs to develop nurseries separate from the PMC or funding requests submitted by the SCC for programs like the Riparian Plant Propagation Program that support plant availability for CD projects. WACD support for funding requests would be contingent on a determination that the proposal would not negatively impact the PMC.

Recommended Monitoring – Monitor reports provided by the SCC on the number of plants provided to CDs and others through the program along with the number and extent of holding sites that are developed. Track CD funding requests through the legislature and funding sources, to the extent possible, that support the development of CD nurseries.

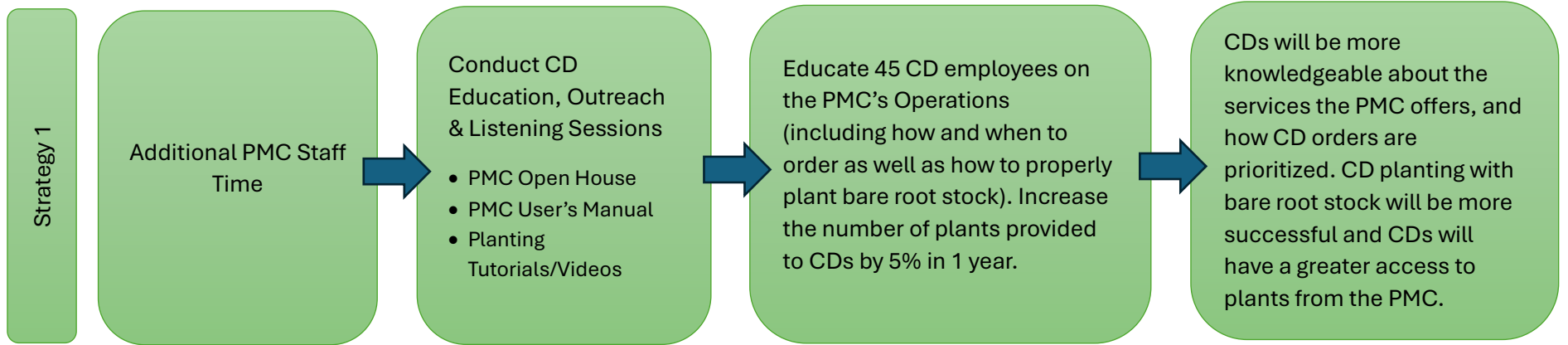
# WACD Plant Materials Logic

Inputs

Activities

Outputs

Outcomes

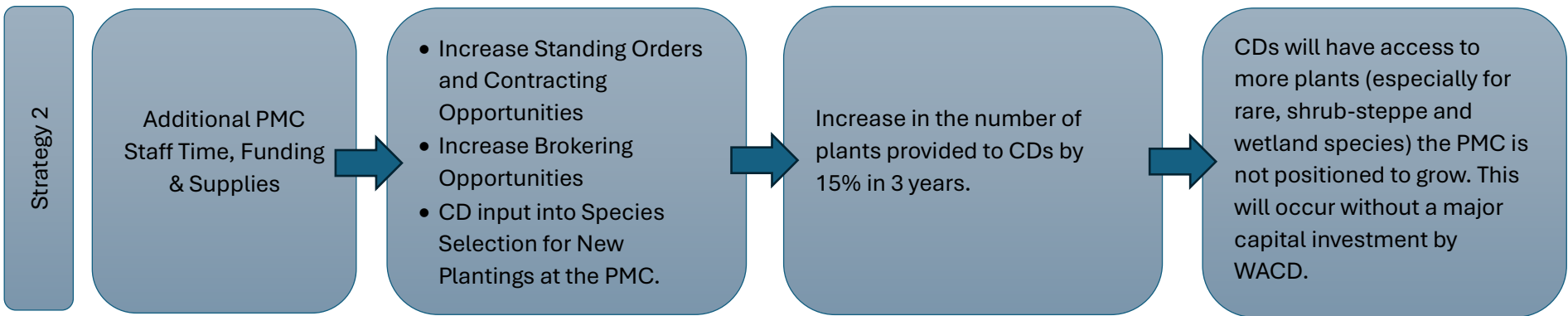


**Assumptions & External Factors**

- Education and outreach will increase available plant availability – multi-year contracts
- The funding for CDs and others to conduct plantings will remain or increase.
- Climate change will not shift planting dates further making bare root stock less desirable.

**Investment & Reward**

Low Investment / Medium Reward

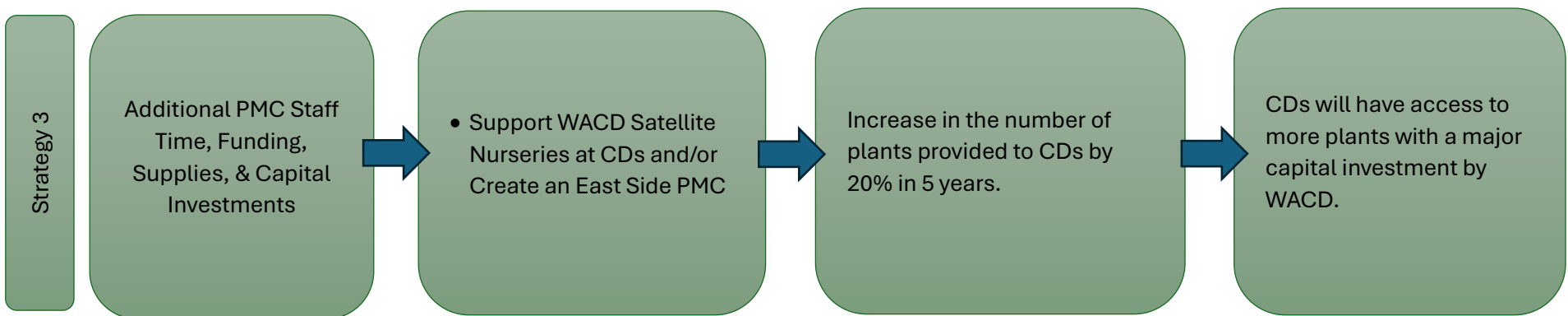


**Assumptions & External Factors**

- Education around brokering and contracting will increase plant availability.
- Districts with sufficient staff will not want to pay the mark-up for brokering.
- The funding for CDs and others to conduct plantings will remain or increase.
- The increased staff time will be offset by brokered orders.

**Investment / Reward**

Medium Investment / Medium Reward

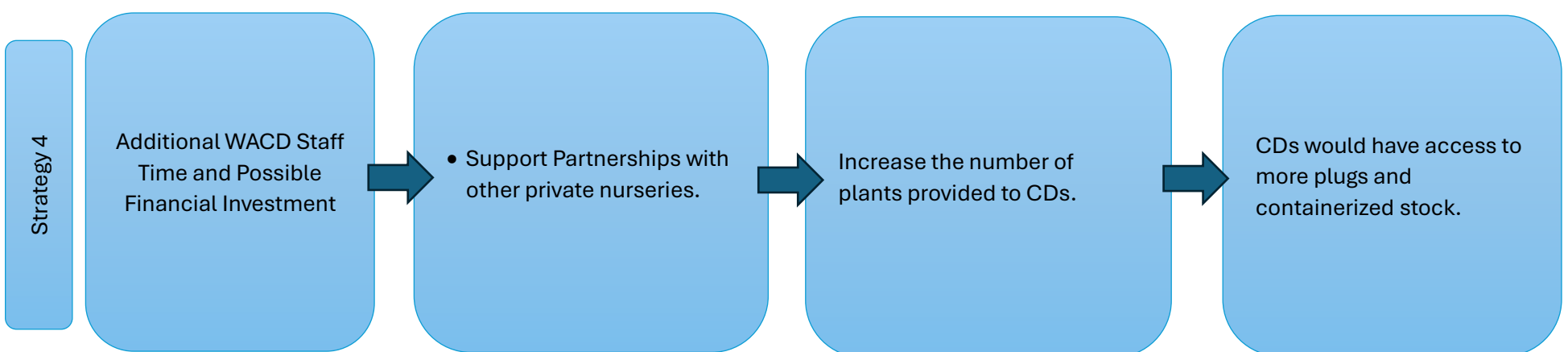


**Assumptions & External Factors**

- The funding for CDs and others to conduct plantings will remain or increase.
- East side nurseries are not meeting the "full" need of CDs. Supplies available of some species do not meet the demand.
- We would need to conduct a feasibility study and seek grant funding for capital project development as a non-profit.
- Increased costs will be offset over time by selling more plants.
- An economic downturn in the nursery industry could cause the collapse of the PMC due to expenditure of reserves.

**Investment / Reward**

High Investment / Medium Reward

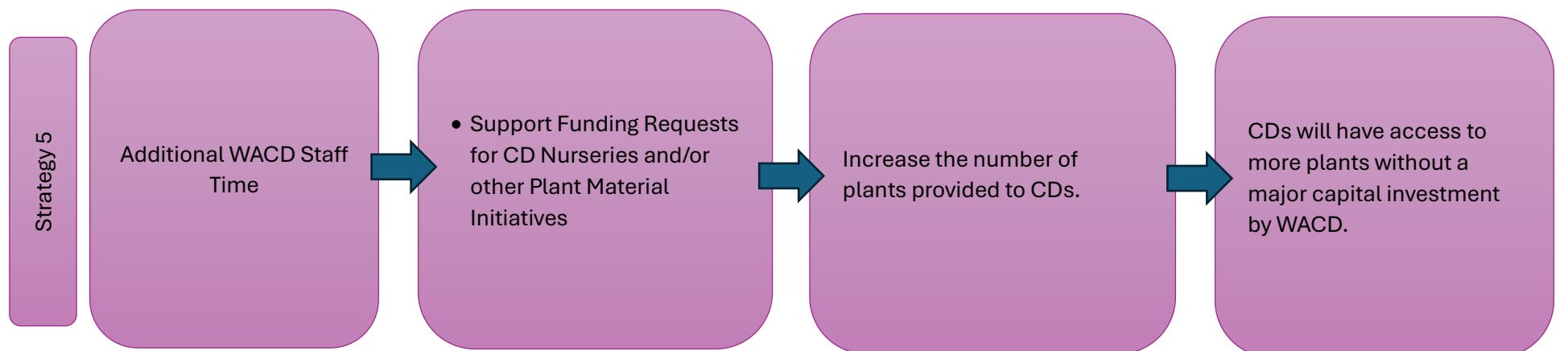


**Assumptions & External Factors**

- The funding for CDs and others to conduct plantings will remain or increase.
- Option 1 - WACD would sell bareroot stock to a private nursery to grow containerized stock.
  - This would still limit containerized stock availability to species grown at the PMC
- Option 2 – WACD would make a capital investment in an existing east side nursery so they can increase production of plants for CDs. In return WACD would share in the profits of plant sales. (Capital investments generally are made to increase operational capacity, capture a larger share of the market, and generate more revenue.)
  - This would create additional stock for eastern and central Washington CDs.

**Investment / Reward**

Medium/High Investment / Medium/High Reward



**Assumptions & External Factors**

- The funding for CDs and others to conduct plantings will remain or increase.
- Funding for CDs and the SCC will continue or increase.
- Support for funding requests would be contingent on a determination that the proposal would not negatively impact the PMC.

**Investment / Reward**

Low Investment / Low Reward



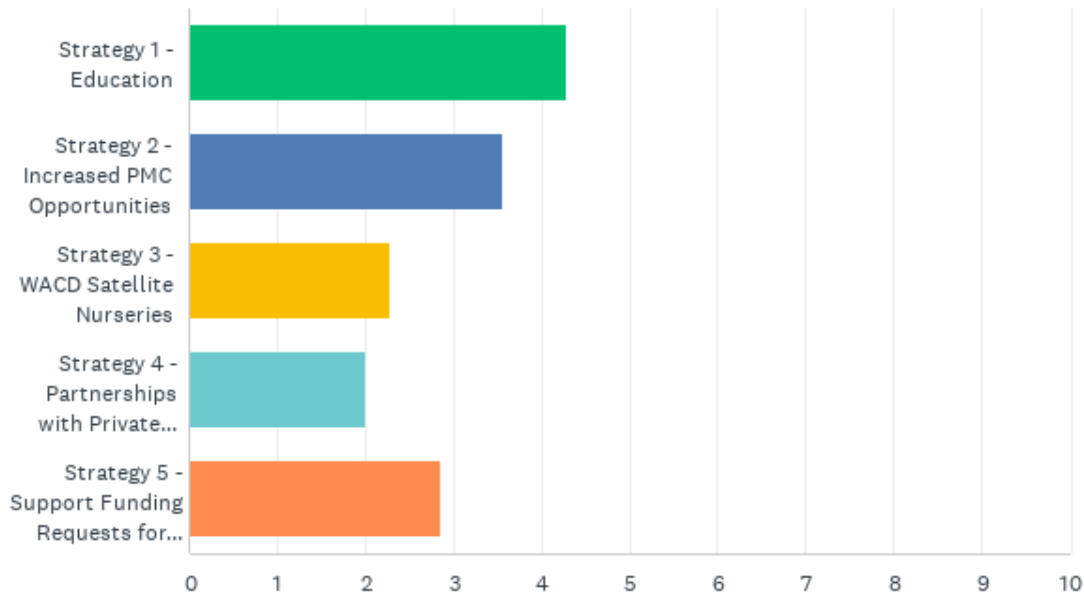
## Recommendations:

Strategy	Activity	Tasks	Initial Required Investment	Timeline / Status
<b>1 - Education</b>	Conduct CD / Customer Education and Outreach & Listening Sessions	Develop a PMC Open House Program – alternating between CDs and Private Sector	Low	On-going
		Develop a PMC User’s Manual with Periodic Review	Low	On-going
		Provide Access to Planting Tutorials/Videos/Virtual Tour	Low	
<b>2 – Increased PMC Opportunities</b>	Increase Standing Orders and Contracting Opportunities	WACD will work with WSCC and the legislature to extend grant funding timelines beyond two years	Medium	
	Increase Brokering Opportunities			
	CD input into Species Selection for New Plantings at the PMC	Create guidelines in the PMC User Manual for new species requests.	Low	
<b>3 – WACD Satellite Nurseries</b>	Support WACD Satellite Nurseries at CDs and/or Create an East Side PMC	Phase 1 - Conduct an east-side assessment and based on the results conduct a feasibility study or pilot project	Medium	
<b>4 – Partnerships with Private Nurseries</b>	Support WACD Partnership with other private nurseries.	Phase 1 – Conduct an assessment and based on the results conduct a feasibility study or pilot project	Medium	
<b>5 – Support Funding Requests for CD Nurseries and/or other Plant Material Initiatives</b>	Support funding opportunities that provide additional plant materials / CD plant propagation opportunities	WACD will support CD and SCC funding requests for initiatives that provide additional plant resources to CDs (RPPP, shrub-steppe, etc.)	Low	

## Conclusion:

The Taskforce members were asked to rank their preferences for the strategies. That ranking is included below. The Taskforce acknowledges that selecting multiple strategies may be necessary to effect meaningful results. Once strategies are selected staff will develop proposed implementation timelines and budgets for final Board approval.

## Q2 Rank the strategies from your favorite to your least favorite.



## References:

[Plant Materials Survey Data](#)

[PMC User Guide for Conservation Districts](#)

[RPPP Presentation by B'Elanna Rhodehamel, SCC](#)