



NYC Parks' Grow Bag Tree Strategy

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Environment & Planning

Parks
Time of Presentation

BACKGROUND



Nursery Tree Growing Methods

- B&B
- Bare-root/Missouri Gravel
- Plastic container
- Grow bags



Balled and burlapped trees being planted in Long Island City, 2023. Photo credit: Haley Hix, NYC Parks

Of these NYC primarily uses the first and is beginning to use the last.

Nursery Tree Growing Methods

- B&B production – liner stages



Nursery Tree Growing Methods

- B&B production – liner to harvest



Nursery Tree Growing Methods

- B&B production –harvest



What is a “grow bag tree”?

Soft/flexible container made from plastic or synthetic fabric



How is it grown?

Grown either in ground or above-ground...or...

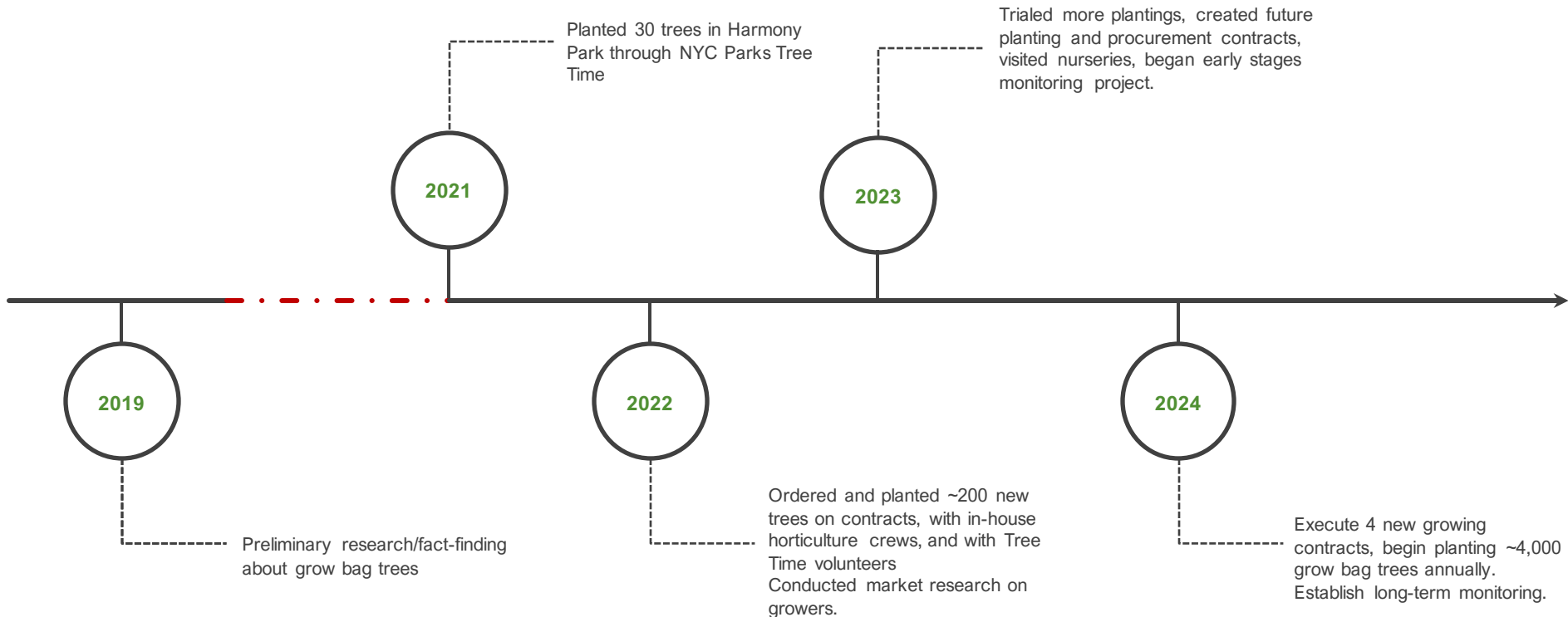


How is it grown?

Field-grown, bare-rooted, and placed into a bag until all fine feeder roots are established.



Timeline: Where We've Been, Are, and Are Going



Why Use Grow Bag Trees?

- ❖ Compared with B&B, they have all their roots in the package +
- ❖ Compared with plastic hard-sided containers, should not have any root girdling issues +
- ❖ Compared with B&B – much lighter and easier to handle due to soilless growing medium +
- ❖ **Compared with B&B – no digging season**

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- ❖ Price savings?



Planting Season Compared to Tree Availability

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tree Planting Seasons			Light Green						Light Green			
B&B Harvesting Seasons			Dark Blue								Light Blue	Dark Blue
Grow Bag Tree Availability			Light Green						Light Green			



How have we trialed them so far?

On contracts



In-house planting



Volunteer plantings



Planting Over Utility Lines in Jackson Heights

Significant community interest in restoring lost canopy in a historic district.



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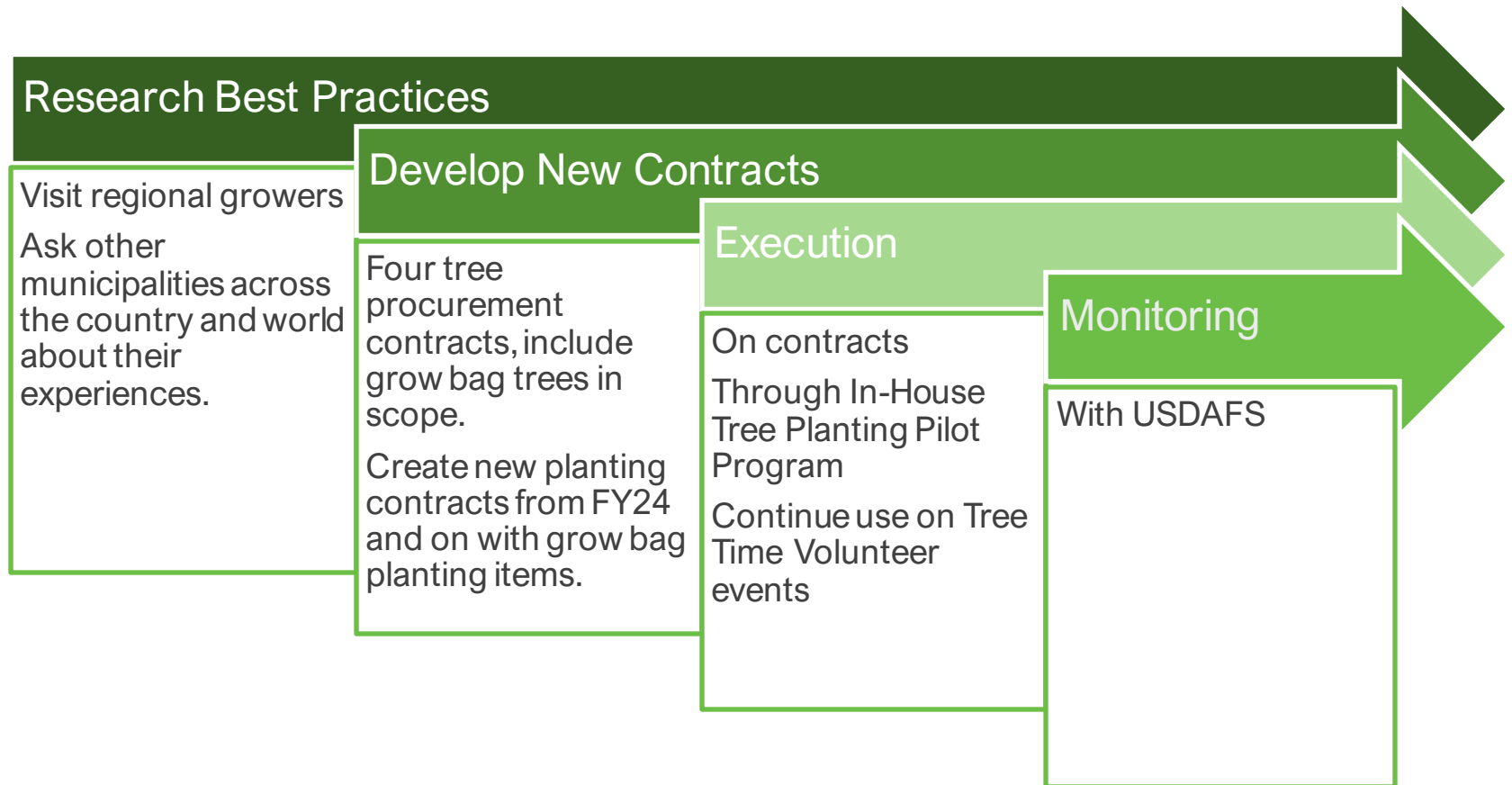
Volunteer plantings



Volunteer Plantings



Next Steps



Contract Mechanisms – New Tree Procurement Contracts

- ❖ Developing specifications, required species lists, and quantities to be grown.
- ❖ Create new tree procurement contracts to provide increased numbers of grow bag trees directly to NYC Parks.
- ❖ 25-, 35-, and 45-gallon sizes

A Collaborative Effort

- GNPC Seed Bed to Tree Bed – Liner-ready trees.
- Other liner or seed sources for tough-to-grow plants across the nation



Monitoring

Design monitoring study with USFS – Phase 3

- ❖ Focus on establishment success or failure
- ❖ Compare with B&B trees of same species
- ❖ Focus on vigor, as measured by various indicators.
- ❖ Could form the beginning of a comparative study for longevity

Conclusion -- ASPIRE

- **A**dapt to challenges
- **S**elect for resiliency
- **P**lant more trees
- **I**ncrease survival
- **R**educe costs
- **E**mploy new technologies