

# Wachusett Reservoir Boat Cove Solar Heat Mat Project



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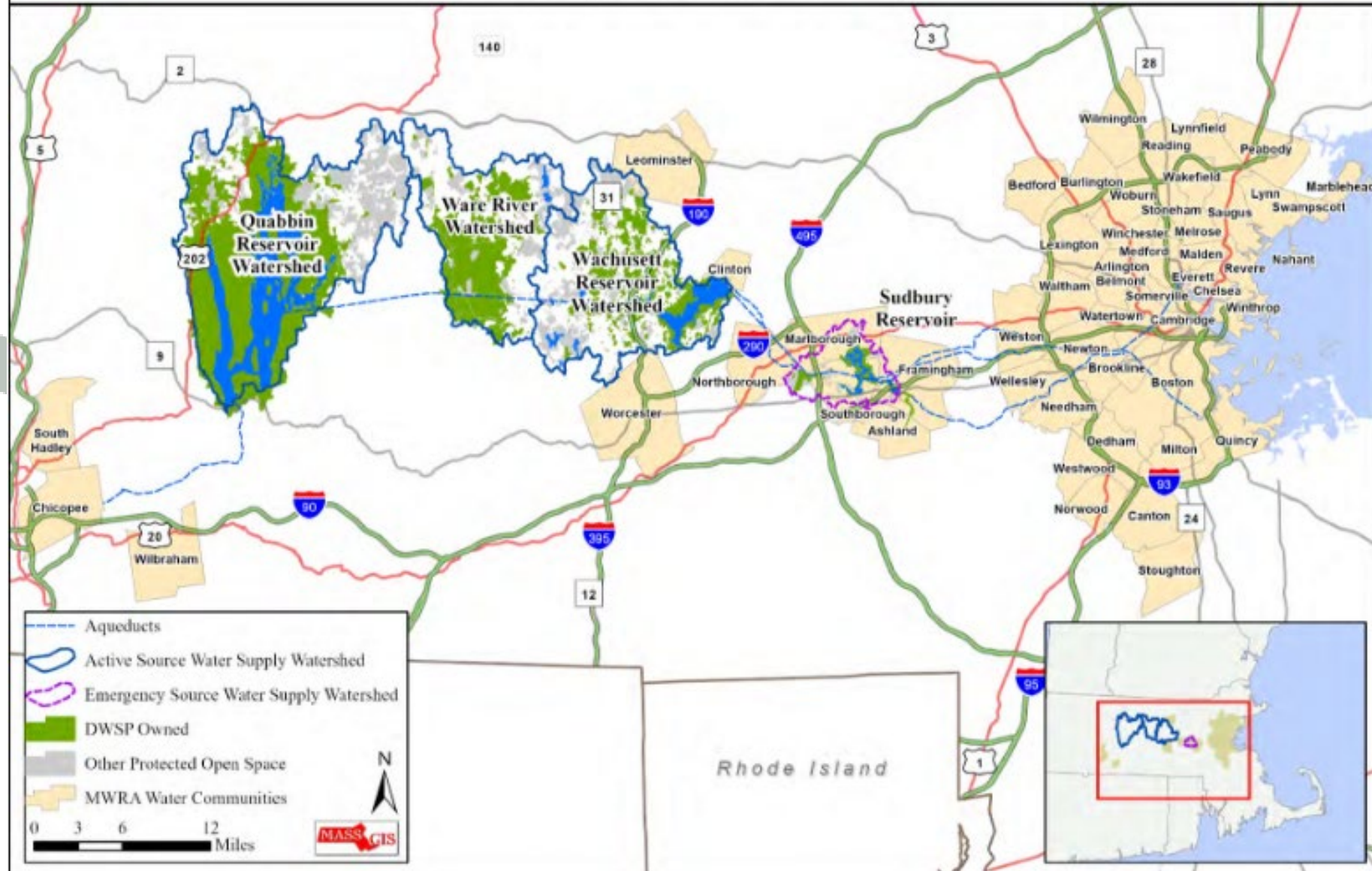


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# General Plan of the DCR/MWRA Watershed System

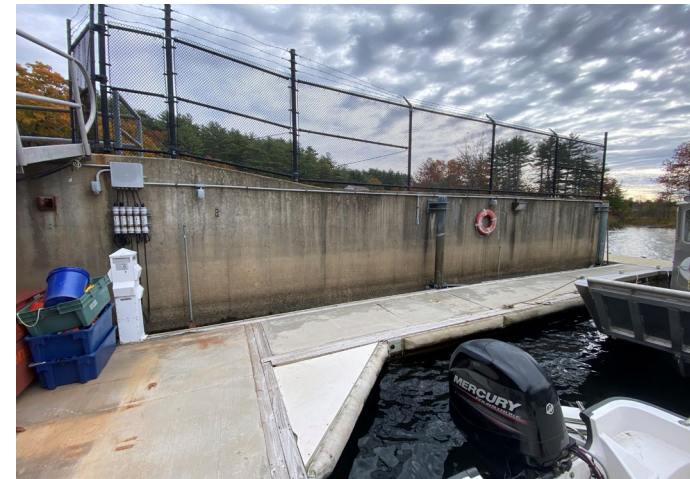
Division of Water Supply Protection - Office of Watershed Management





# Boat Cove Construction

- Concrete walls
- Floating horseshoe dock
- Dock three (3) boats during the season
- Pedestrian ramp access



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# Boat Cove Usage

- Patrol
- Environmental monitoring
- Natural resource monitoring
- Engineering & Maintenance
- Emergency response
- Bird harassment
- Trainings



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# Boat Dock & Ramp Winter Access

- Keeping dock perimeter unfrozen
- De-icing access ramp and dock landings
- Shovel & Plowing



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# Project Goals

- Reduce carbon footprint
- Reduce use of snow & ice melts
- Improve overall conditions
- Improve health & safety



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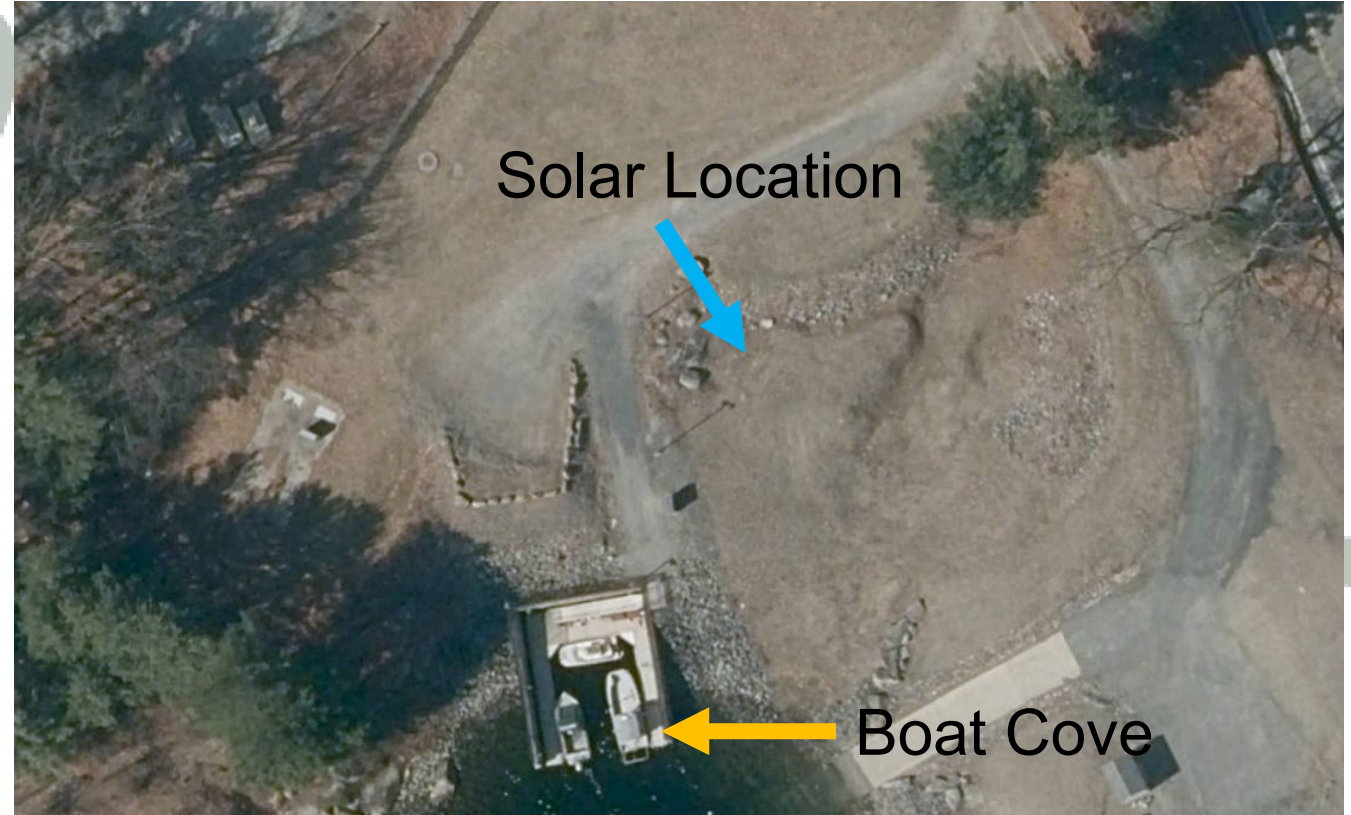
# Heating Mats

- HeatTrack
  - 240V
  - 4.4 - 8.8A
- Each has its own lead
- Ability to secure to ground
- Melts up to 2" of snow per hour



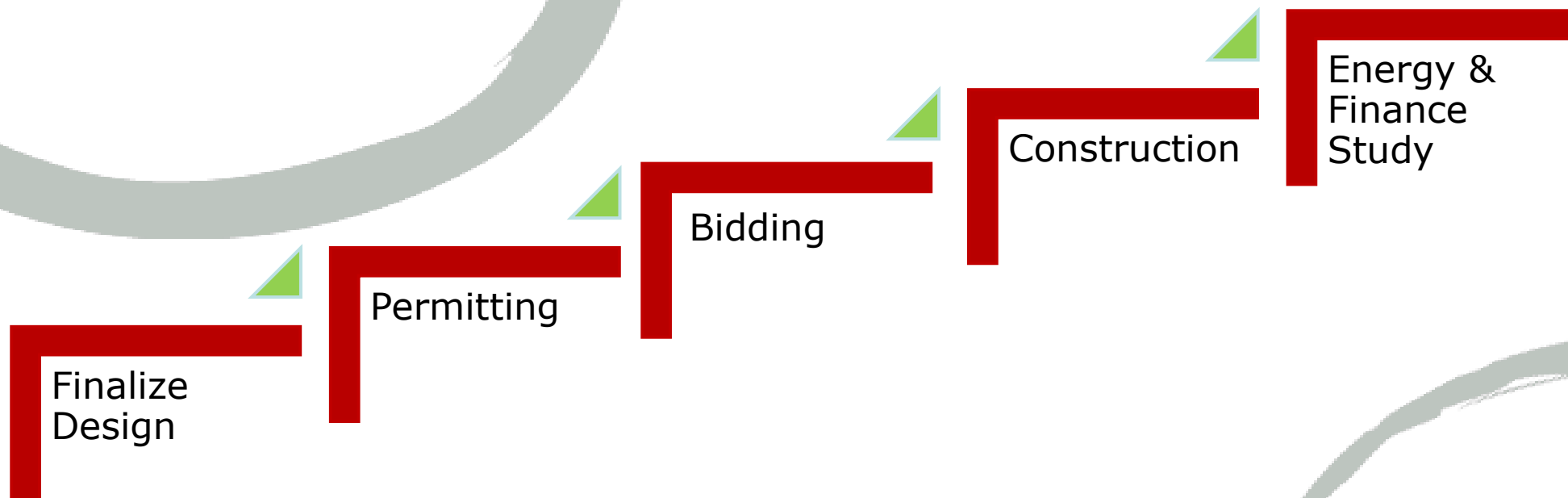
# Project Draft Design

- Two (2) – 8kw PV arrays  
(4 rows x 5 columns)
  - Ballast mount
- DC Disconnects
  - GFCI Protection
- NEMA 6-15 Receptacles
- Eight (8) Heating Mats
- Mobile power station
- Utility option





# Next Steps



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# Takeaways & Lessons Learned

