Windy Gap Firming Project
Chimney Hollow Hollow Reservoir

Fall Water Users
November 14, 2018
Agenda

- Chimney Hollow Reservoir Overview
- How does it work?
- Notable Features
  - Asphalt Core Main Dam
  - Onsite Quarry
  - Tunnel
  - Valve House
- Construction Procurement
- Questions?
Chimney Hollow Reservoir Components
How does it work?
Anatomy of Chimney Hollow Main Dam

- Excavation: 2,000,000 CY
- Concrete Plinth: 5,000 CY
- Grouting:
  - 3000 holes
  - 150,000 ft of drilling
  - 8,400 CY Grout
- Asphalt Core: 74,000 CY
- Filters / Transitions: 1,200,000 CY
- Rock Fill / Riprap: 11,000,000 CY
Where do we find all this rock?

Pegmatite Intrusions
(The not-so good stuff)

Silver Plume Granite
(The good stuff)

Sedimentary Overburden
(Waste Rock)
Quarry Operations

Drill and Blast

Primary Crush

Secondary Crush

Sort and Stack

Muck and Haul

Wash Plant

Overburden / Waste

Rockfill / Riprap

Fine Filters (<1”)

Course Filters (<2.5”)

Concrete Aggregates

Fine Transition (<2.5”)

Asphalt Aggregates

Course Transition (<6”)
Inlet / Outlet Tunnel

- Inlet / Outlet Structure
  - Approximately 75-ft tall
- Upstream Tunnel: First 1,250-ft
  - 9.5-ft Horseshoe Tunnel
  - 6-ft diameter steel pipe
- Valve Chamber: 40-ft length
  - 28-ft diameter
  - Isolation valve
- Downstream Tunnel: 660-ft length
  - 22-ft diameter
Valve House Configuration

- Connection to Bald Mnt. Tunnel
- Flatiron Reservoir Release Channel
- Rollup Door
- Connection to Carter Lake
- Control Room (Heat and AC)
- Connection to Chimney Hollow Res.
Construction Procurement

Safety:
Zero Accidents

Quality:
Focus on Dam Safety

Project Delivery:
Cost & Schedule Certainty

Transparency:
No Surprises

Environmental Compliance:
Proactive Construction

Collaboration:
Share Stakeholder Interests
Questions?