

APDVD -- Informational Meeting on the Ashuelot Pond Dam

Oct. 8, 2026 / 7:00pm-8:30pm / Washington Town Hall

Purpose of the Meeting

The commissioners held an informational session—*no votes were taken*—to update residents on the condition of the Ashuelot Pond dam, recent engineering analysis, regulatory requirements, and potential rehabilitation options.

Background & Regulatory Context

- The dam's hazard rating was raised from "Significant" to "High Hazard" by NH DES in 2022.
- High hazard classification means failure could cause loss of life or major property damage downstream.
- The dam previously had a Letter of Deficiency, now closed, but DES expects further action.
- High hazard dams must safely pass the 1,000-year flood with 1 foot of freeboard and no overtopping or have in place an approved safe design alternative.

Hydrology & Hydraulic Findings

Engineer Charlie Johnston (DuBois & King) presented updated modeling:

- The dam will overtop by ~1 foot during a 1,000-year storm.
- Even a 100-year storm produces minor overtopping.
- Updated modeling shows prior estimates were overly conservative, but overtopping still occurs.
- Breach modeling confirms:
 - Several downstream homes would be inundated.
 - Flood wave velocities could reach 5 ft/sec, enough to destroy structures.

This confirms the high hazard classification.

Current Dam Conditions

- The dam is an earthen embankment with two rock spillways.
- Concrete between rocks is deteriorating.
- Some seepage and leakage occur through rock voids.
- Past overtopping has caused sinkholes and erosion concerns.
- Public safety concerns exist because people walk across the spillway.

Rehabilitation Options Presented

Option 1 — Geocell Overtopping Protection + Flashboards

- Cost: ~\$375,000 (with engineering & permitting)
- Uses plastic geocells filled with stone + collapsible flashboards.
- DES is unlikely to approve this method.
- Requires draining the pond for the summer.

Option 2 — Labyrinth Concrete Spillway (High-End Option)

- Cost: ~\$1.5 million
- Large reinforced concrete structure; highly efficient and low-maintenance.
- Prevents overtopping entirely.
- Major construction footprint; requires significant site changes.

Option 3 — Articulated Concrete Blocks (ACBs) — *Recommended Option*

- Cost: ~\$500,000
- Uses engineered concrete blocks with steel cables to armor the dam.
- Allows controlled overtopping without failure.
- Does not require draining the pond.
- Minimal environmental impact compared to other options.
Comments were taken about wetlands design implications.
- Long lifespan (manufacturer claims ~100 years).

This option also includes raising the grade near the boat launch by ~2 feet to prevent water from bypassing the dam. Questions and comments were addressed.

Funding Discussion

- FEMA's High Hazard Potential Dam (HHPD) program can cover 65% of costs.
- NH DES indicated Ashuelot Pond Dam ranks high on the priority list.
- However, recent federal funding rounds were drastically reduced. NH's emergency management office declined to apply for the latest round.
- The commissioners plan to wait for the next funding cycle before committing.

Next Steps

- Await DES review of the hydrology submission.
- Continue preparing for FEMA funding opportunities.
- Likely vote on a preferred alternative at the July 2027 annual meeting.

Key Takeaways

- The dam must be upgraded to meet high-hazard safety standards.
- Three options exist; ACB overtopping protection is the most practical and cost-effective.
- Funding availability will heavily influence timing.
- No immediate action will be taken until DES feedback, and federal funding opportunities are clearer.