GE-Pittsfield / Housatonic River Site
Rest of River

Overview of Revised Transportation and Disposal Plan

December 4, 2024

SEMS Doc ID 686810

Agenda

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General Overview

GE has performed a thorough evaluation of various modes of transportation and selected an approach that:

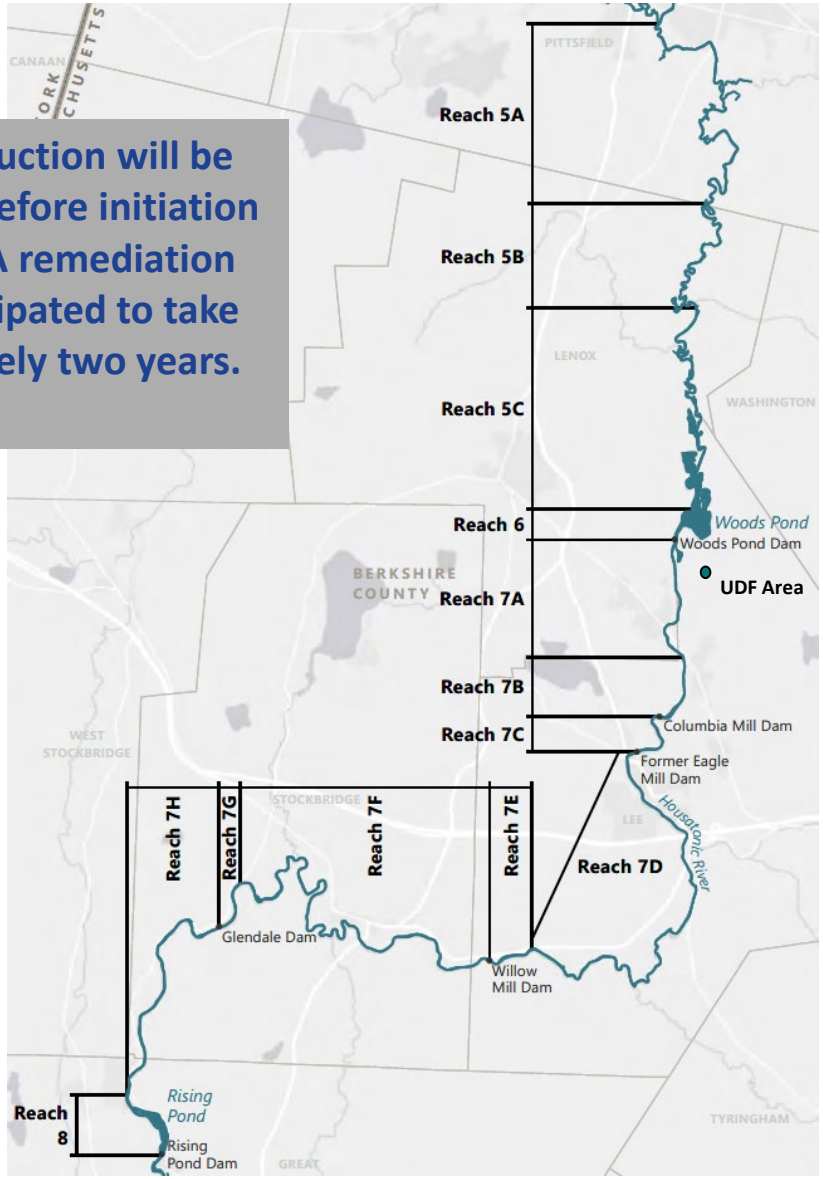
- Maximizes the use of hydraulic transport; 79% of material will be transported hydraulically without the need for trucks (up from 57% under prior plan);
- Maximizes the use of rail transport for on-site and off-site disposal; 17% of material will be transported by rail (combined with truck); and
- Minimizes use of trucking alone; only 4% of material will be transported solely by truck.
- Proposed approach results in the fewest local round-trip truck miles of all alternatives – next closest alternative has 70% more truck miles.

Transportation & Disposal Requirements for Remediation

- EPA's 2020 RCRA Permit requires a "hybrid" disposal approach for excavated soil/sediment:
  - Materials that meet specific low-level PCB concentration criteria will be disposed of at an Upland Disposal Facility (UDF) constructed on GE-owned property just south of Woods Pond; and
  - Materials that don't meet the UDF disposal criteria must be sent off-site for disposal; however, a minimum volume of 100,000 cy must be sent off-site.
- The 2020 RCRA Permit requires measures to "maximize the transport of . . . waste material to off-site facilities via rail, to the extent practicable." As directed by EPA and included in GE's Statement of Work, **GE has undertaken an evaluation of the potential use of rail for transport to both the UDF and to off-site disposal facilities.**
- **GE has also undertaken an evaluation of maximizing the use of hydraulic transport, as practicable.**

ROR Reaches and Schedule Overview

UDF construction will be completed before initiation of Reach 5A remediation and is anticipated to take approximately two years.



Years 1 through 10

Years 10+

Estimated Removal and Disposal Volumes

Reach	Estimated Removal Volume (cy)	Estimated UDF Disposal Volume (cy)	Estimated Off-Site Disposal Volume (cy)
5A	138,700	130,200	8,500
5B	21,000	19,000	2,000
5C	261,000	235,000	26,000
6 (Woods Pond)	537,200	531,600	5,600
7B	18,000	18,000	0
7C	20,000	20,000	0
7E	4,500	4,500	0
7G	14,500	0	14,500
8 (Rising Pond)	50,000	6,600	43,400
Totals (estimated)	**1,064,900**	**964,900**	**100,000**

- Estimated volumes from Revised T&D Plan.
- Off-site disposal volume will be determined using Permit criteria with a minimum volume of 100,000 cy.
- All quantities are preliminary and subject to change during design activities.

Overview of Modes of Transport

- In the Revised T&D Plan, GE evaluated three potential methods to transport sediment and soil to the UDF or for off-site disposal:
  - Hydraulic transport
  - Truck transport
  - Rail/truck transport
- **There is no scenario in which the use of "only rail" transport for the ROR Remedial Action is feasible.**

Hydraulic Transport

- Hydraulic dredges remove sediment as a slurry by dislodging sediment and sucking the sediment into a pipeline with a dredge pump.

- A relatively large amount of water (~90% by weight) is sucked with the sediment to create a slurry.
- The slurry is hydraulically transported to a dewatering area using large-diameter pipes and pumps

Hydraulic Transport (cont'd)

- Total of 79% of material removed from the ROR will be transported hydraulically without the need for trucks. This will include the following:
  - 74% of removed material (sediments from Reaches 5C, 6, 7B, and 7C) will be hydraulically transported directly to the UDF.
  - 5% of removed material (sediments from Reaches 7G and 8) will be transported hydraulically to a staging/rail loading area at Rising Pond for off-site transport by rail.
- Only 21% of material removed from the ROR will require truck or rail/truck transport.
- Substantial increase in hydraulic transport from 2023 plan (under which 57% of material would be hydraulically transported, with 43% by truck).

Truck Transport

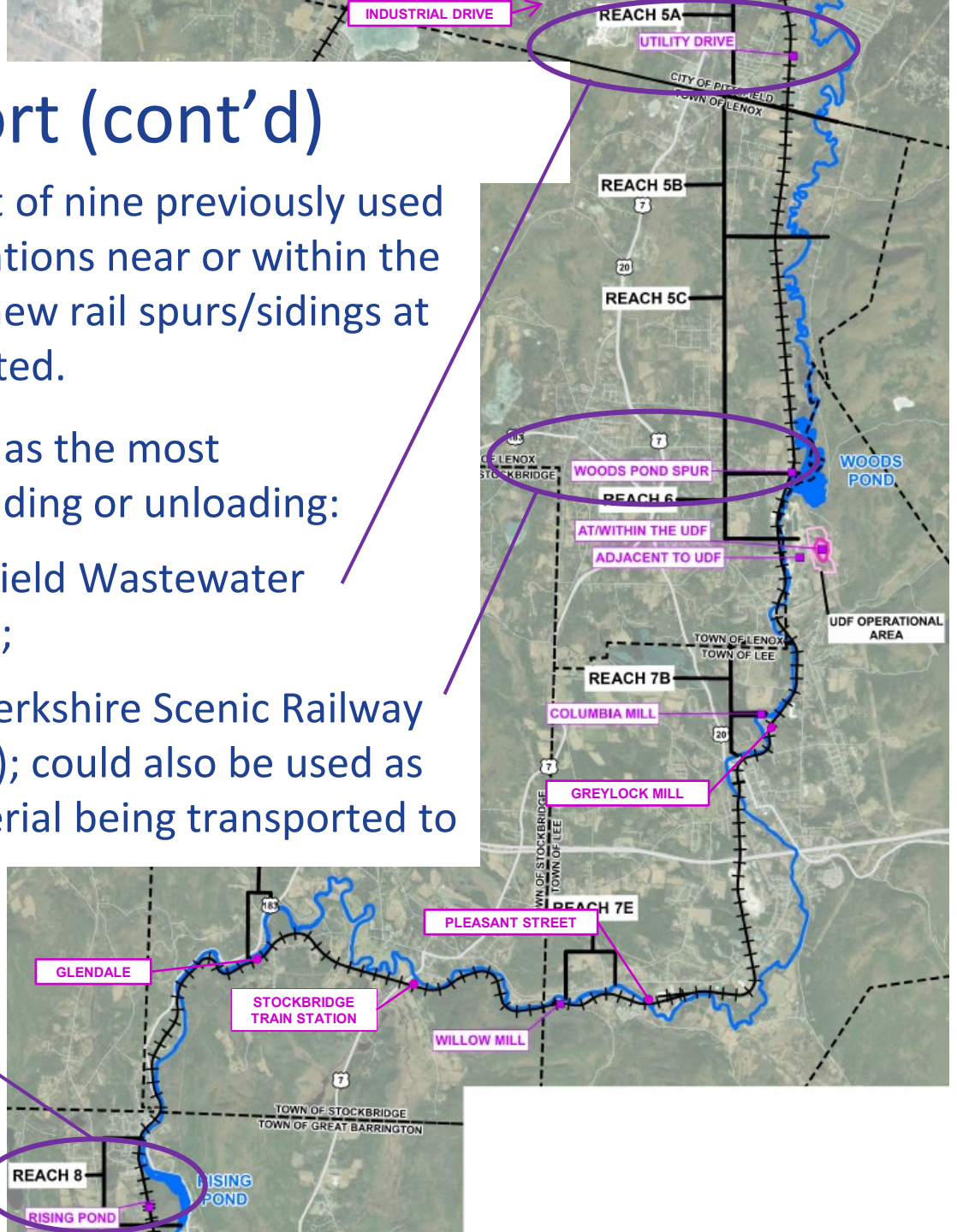
- Trucks are a viable mode of transport that provides scheduling flexibility and easy access to removal and staging areas.
- Truck transportation was the mode of transportation approved or selected by EPA for all of the materials removed from the Upper ½ Mile Reach of the Housatonic River and the 1½ Mile Reach of the River.

Rail/Truck Transport

- Rail, another mode of transport, is typically used when materials from remediation projects will be transported over long distances for disposal.
- Rail transport requires the use of trucks and equipment to move material to/from a rail siding.
- No active railroad sidings are available near the removal areas that could be used in their current condition. Thus, GE evaluated potential locations for the necessary rail loading and/or off-loading areas.

Rail/Truck Transport (cont'd)

- Evaluation included assessment of nine previously used rail spurs/sidings, including locations near or within the UDF area. The construction of new rail spurs/sidings at three locations was also evaluated.
- Three locations were identified as the most practicable options for a rail loading or unloading:
  - **Utility Drive**, near the Pittsfield Wastewater Treatment Plant (Reach 5A);
  - **Woods Pond Spur**, at the Berkshire Scenic Railway Museum property (Reach 6); could also be used as rail unloading area for material being transported to the UDF; and
  - **Rising Pond Property**, on property GE is transferring to the Town of Great Barrington (Reach 8).



Transportation Scenarios

- Four site-wide scenarios were identified to evaluate combinations of hydraulic transport, truck transport, and rail/truck transport for transport to the UDF and to off-site disposal facilities.
- All four scenarios include hydraulic transport of at least three-quarters of the removed sediments and soils, with truck and/or rail/truck transport for the remainder.
  - **Scenario 1** – Trucking to UDF and for Off-Site Disposal
  - **Scenario 2** – Trucking to UDF and All Rail/Truck for Off-Site Disposal
  - **Scenario 3** – Trucking to UDF and Mostly Rail/Truck for Off-Site Disposal
  - **Scenario 4** – Mostly Rail/Truck to UDF and All Rail/Truck Transport for Off-Site Disposal

Transportation Scenarios (cont'd)

- For all scenarios, some trucking will be needed to transport materials directly to the UDF.
  - Soil from Reaches 5B, 5C, and 6 as well as sediment from Reach 7E cannot be hydraulically transported.
  - Trucking these material directly to the UDF will result in fewer truck miles on public roads than any other method evaluated.
- The anticipated amount of material requiring direct trucking is ~4% of the total project volume.

Transportation Scenarios (cont'd)

Scenario 1 – Trucking to UDF and for Off-Site Disposal

- Hydraulic transport of 74% of est project volume directly to UDF for disposal.
- For the remaining 26%:
  - Truck 17% to UDF .
  - Truck 9% to existing commercial rail loading facility in Albany for rail transport to out-of-state disposal facility.

Scenario 2 – Trucking to UDF and Rail/Truck for Off-Site Disposal

- Hydraulic transport of 79% of removed material, including hydraulic transport of 74% directly to UDF and 5% to Rising Pond rail loading area for rail transport to out-of-state disposal facility.
- For the remaining 21%:
  - Truck 17% to UDF.
  - Rail/truck transport of 4% to off-site disposal facility, using the three proposed on-site rail loading locations (Utility Drive, Woods Pond Spur, Rising Pond Property)

Transportation Scenarios (cont'd)

Scenario 3 – Trucking to UDF and Mostly Rail/Truck for Off-Site Disposal

- Same as Scenario 2 except truck material from Reaches 5A & 5B to commercial rail facility in Albany, reducing on-site rail loading locations to two – Woods Pond Spur and Rising Pond Property.

Scenario 4 – Mostly Rail/Truck to UDF and All Rail/Truck for Off-Site Disposal

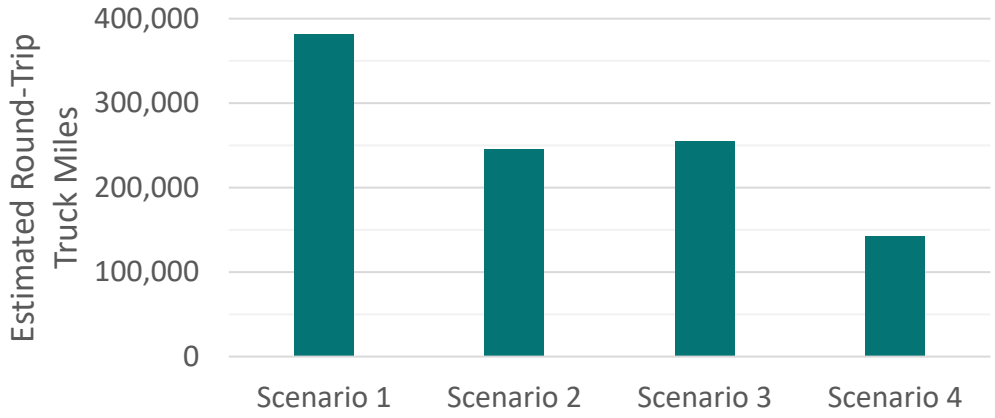
- Hydraulic transport of 79% of removed material, including 74% directly to UDF and 5% to Rising Pond rail loading area – same as Scenarios 2 and 3.
- Truck transport of 4% of removed material directly to the UDF (less trucking than rail/truck).
- For the remaining 17% of removed material, build and use all three proposed rail locations (Utility Drive, Woods Pond Spur, Rising Pond Property) for rail/truck transport to UDF and off-site disposal.

Evaluation of Transportation Options

- The evaluation of the transportation options considered anticipated volumes and locations for removal, spread over ~30 miles of river, and proximity to the UDF and/or the state highway system.
- GE also considered the following key factors in the evaluation:
  - Truck trips and miles
  - Greenhouse gas emissions
  - Work site and transport-related injuries and fatalities
  - Quality-of-life impacts (e.g., air, noise, light, hours, infrastructure, recreation)
  - Ecological impacts
  - Logistical and implementability considerations
  - Schedule considerations for construction of supporting infrastructure

Conclusion/Proposed Scenario

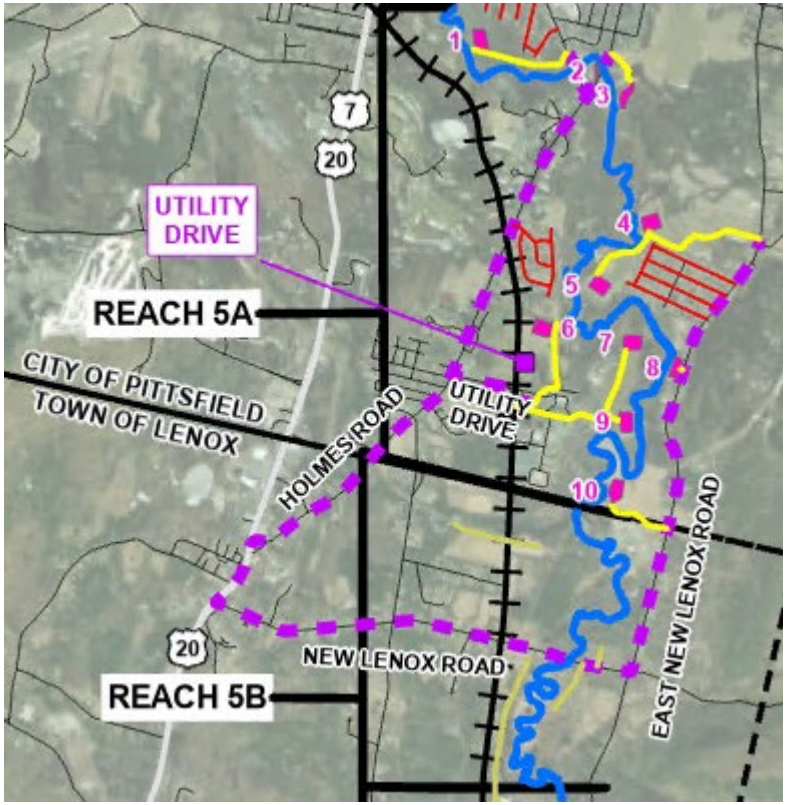
- **GE has recommended Scenario 4** as the site-wide approach to transporting and disposing of material removed during the ROR Remedial Action.
  - This recommendation is based on the preference of some in the community for a reduction in local round-trip truck miles, since it has by far the fewest round-trip truck miles (over 260% reduction in truck miles from Scenario 1).



- This scenario is heavily dependent on the railroad meeting the project schedules. If Scenario 4 cannot meet ROR Remedial Action target production rates for sediment and soil removal, truck transport will be necessary to supplement rail/truck transport.

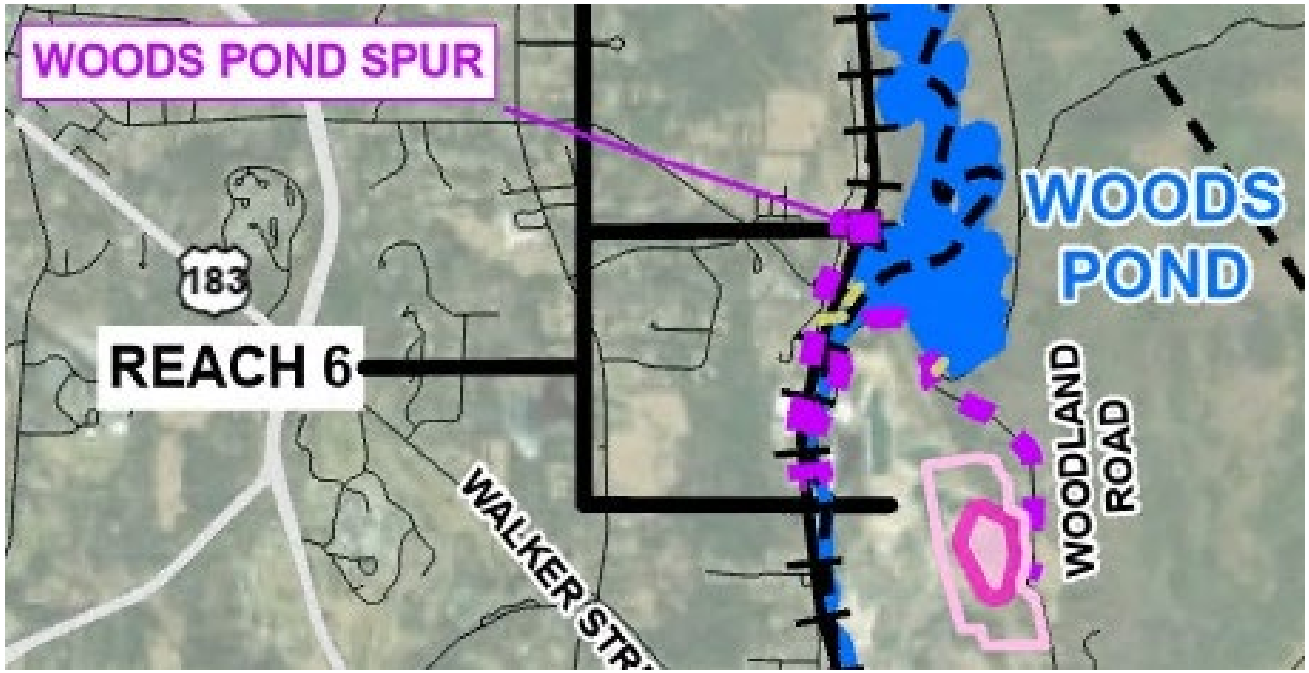
Proposed Truck Routes for Scenario 4 – Reach 5A (Years 1 through 5)

- Material for on-site and off-site disposal will go to the Utility Drive rail loading area predominantly using the following roads:
  - East New Lenox Rd, New Lenox Rd, US-20, Holmes Rd, Utility Dr.
- Material for on-site disposal will then go via train to the Woods Pond Spur for unloading and then to UDF predominantly using the following roads:
  - Primary Route: Willow Creek Rd, Crystal St, across Schweitzer Bridge, Valley St (partly privately owned), and Woodland Rd.
  - Secondary Route: Willow Creek Rd, Crystal St, Mill St (and bridge, not shown), Willow Hill Rd, and Woodland Rd.



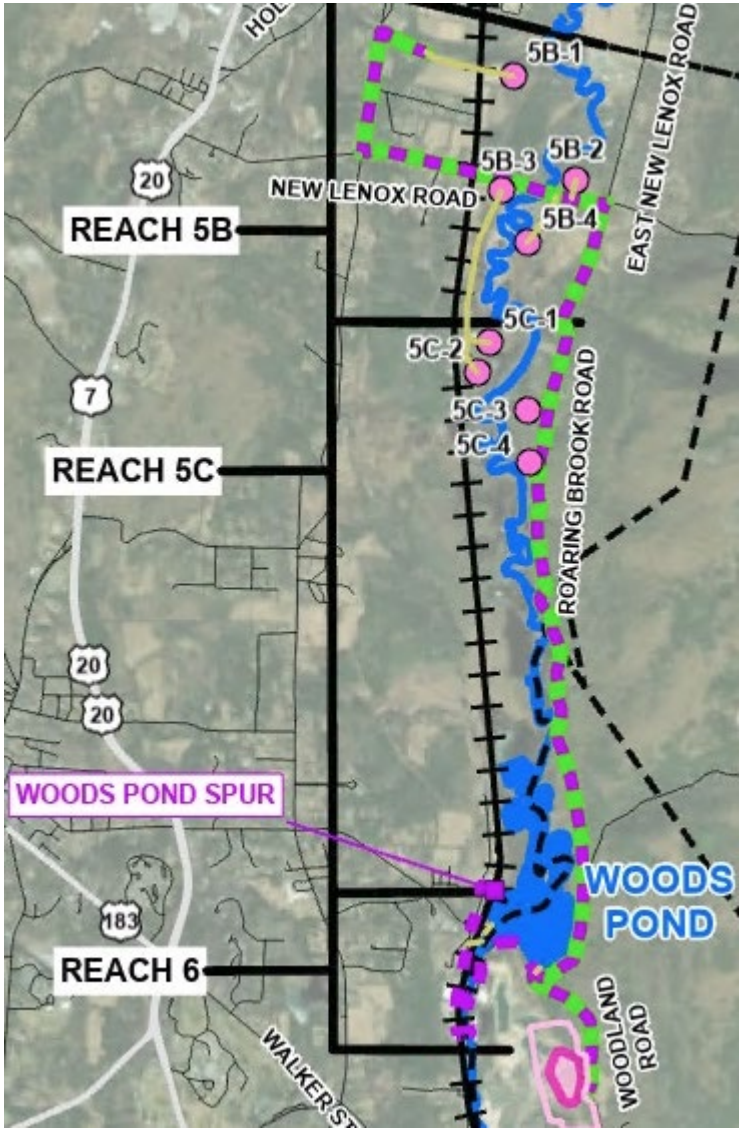
Proposed Truck Routes for Scenario 4 – Reach 6 (Years 3 to 5)

- All material for on-site disposal (the great majority of material) will be hydraulically transported directly to the UDF except for a small volume (one truckload) of soil that will be driven directly to the UDF.
- Material for off-site disposal will go to the Woods Pond Spur rail loading area via same routes proposed for offloading Reach 5A material for transport to the UDF.



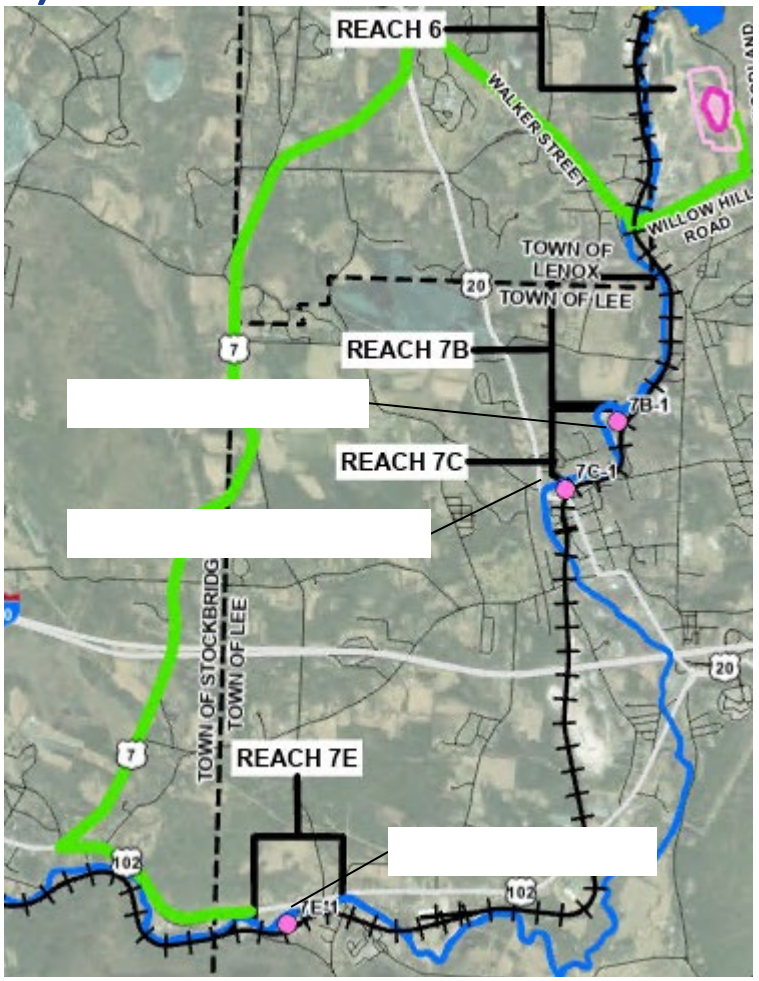
Proposed Truck Routes for Scenario 4 – Reaches 5B/5C (Years 6+)

- Most material from these reaches for on-site disposal (85%) – consisting of sediments from Reach 5C – will be transported hydraulically to the UDF.
- Soils from Reach 5C and all material from Reach 5B for on-site disposal will be trucked directly to the UDF, predominantly using the following roads:
  - East St, New Lenox Rd, Roaring Brook Rd, and Woodland Rd.
- Material for off-site disposal will go to the Woods Pond Spur rail loading area:
  - Either via the UDF using the primary or secondary routes proposed for Reach 5A materials; or
  - Directly using predominantly East St, New Lenox Rd, Roaring Brook Rd, and from there the routes proposed for Reach 5A materials.



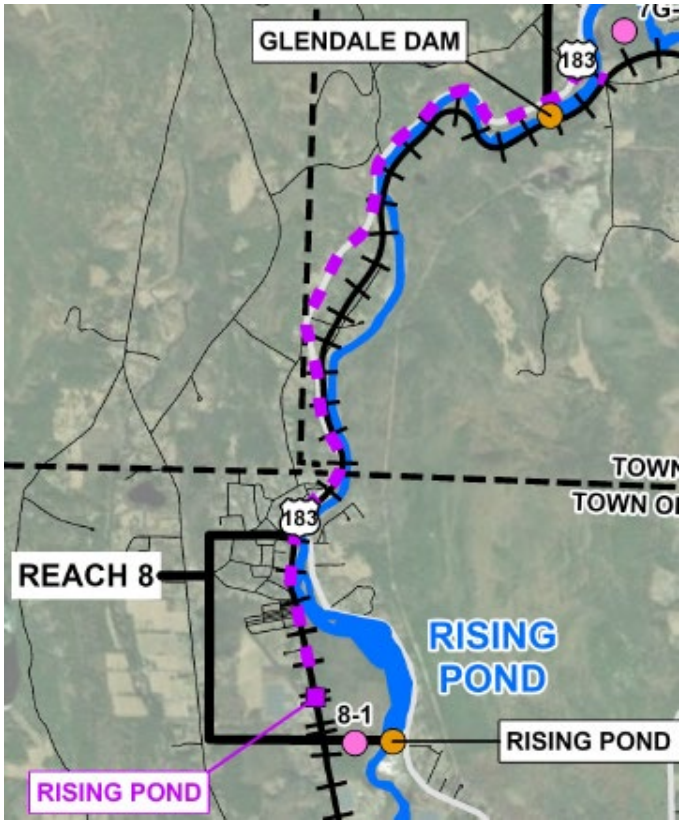
Proposed Truck Routes for Scenario 4 – Reaches 7B, 7C, 7E (Years 10+)

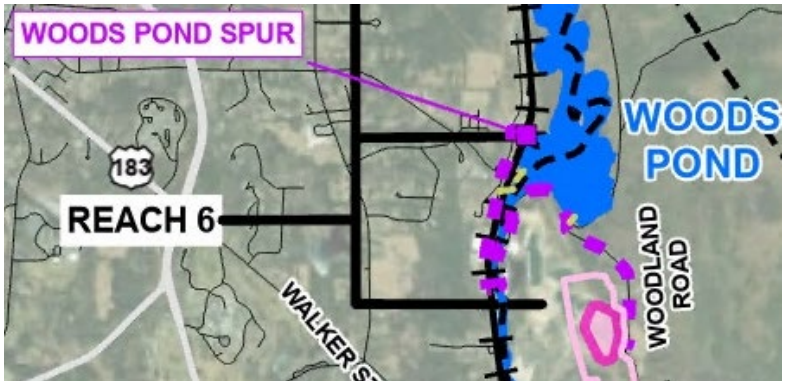
- Material from Reaches 7B and 7C, which is all for on-site disposal, will be hydraulically transported to the UDF.
- Material from Reach 7E, which is all for on-site disposal, will go directly to the UDF primarily using the following roads:
  - MA-102, US-7, US-20, Walker Street, Mill St, Willow Hill Rd, and Woodland Rd.



Proposed Truck Routes for Scenario 4 – Reaches 7G and 8 (Years 10+)

- Sediment from Reaches 7G and 8 will be hydraulically transported to Rising Pond rail loading area for on-site or off-site disposal via rail.
- Soils from Reach 7G will go to the Rising Pond rail loading area, predominantly using the following roads:
  - Glendale Middle Rd, MA-183, Front St, Van Deusenville Rd.
- On-site material will go from Woods Pond Spur rail unloading area to UDF via the primary or secondary routes proposed for Reach 5A.





Quality of Life Considerations

- The project's Quality of Life Standards (e.g., for noise, PCBs in air, dust, lighting, odor) will be applicable to T&D operations.
- Transport of materials will be performed by trained and licensed haulers familiar with how to respond to emergencies such as accidents, spills, releases, or other incidents.
- Trucks and rail containers will be certified/inspected and lined/covered and will undergo safety checks and appropriate labeling.
- Traffic control measures in the form of best management practices and temporary controls will be implemented to minimize potential traffic impacts/ accidents, including posting of traffic control signs (e.g., speed, parking areas) and, where appropriate, use of traffic control personnel (e.g., flaggers).
- Measures will be implemented to mitigate traffic and roadway infrastructure impacts – e.g., evaluation of need for reconditioning/upgrading local roads, monitoring of local municipal roads and infrastructure before, during, and after remediation to assess impacts from project.
- All activities will be conducted under EPA oversight.

Summary and Next Steps

- **The transportation approach selected by GE:**
  - **Maximizes use of hydraulic transport to the UDF;**
  - **Maximizes the use of rail transport for on-site and off-site disposal; and**
  - **Results in the fewest local round-trip truck miles.**
- T&D Plan public input period ends January 15, 2025.
- Updates related to transportation and disposal will be developed as the design proceeds and will be included in final work plans for each reach (or other subsequent documents). Such updates will include:
  - Final specific methods of transportation and the transportation routes to the UDF and the selected off-site disposal facility(ies); and
  - Selection of the off-site disposal facility(ies).