



Water Resources Advisory Commission Recreation Issues Workshop June 21, 2010

**Water Conservation Area 3
Decomartmentalization - Miami Canal**

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Miami Canal Potential Backfill & Plug Alternatives - Overview

- Purpose: Understand stakeholders' view of the Miami Canal conceptual alternatives for backfilling
- Tonight
 - Present the conceptual alternatives
 - Discuss Miami Canal only
 - Discuss access



Conceptual Alternatives

- Decomartmentalization Project Purpose Overview
 - How L67-A and C differ from the Miami Canal
 - DPM contributing to Project Implementation Report (PIR) II and III uncertainties
 - PIR I purpose
- Uncertainties
 - Amount of actual fill available
 - How to backfill
 - Other project features
 - Retain Florida Fish and Wildlife Conservation Commission-planted spoil mounds
 - Backfill or plugs



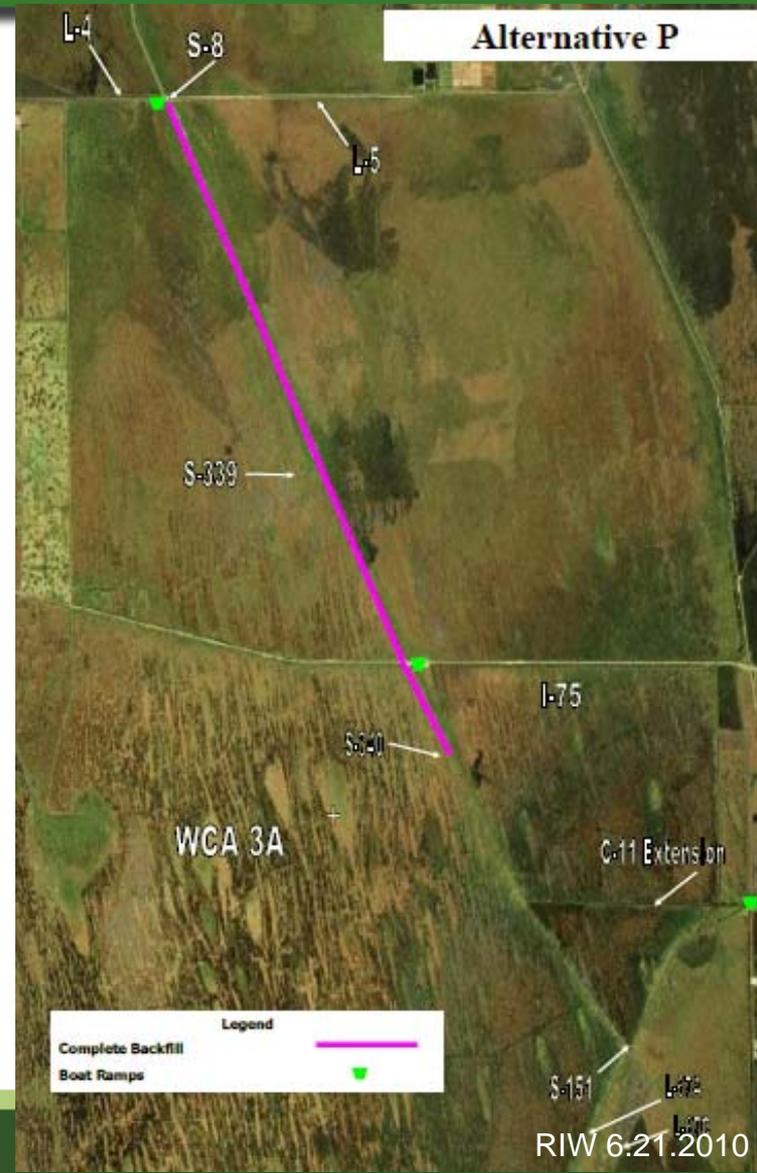
Alternative I/K

- Complete backfilling of all three sections (S-8 to S-151) using all available on-site fill material and importing additional fill that is required
- *This alternative matches the Yellow Book version for filling the Miami Canal and removing its effects from the system*



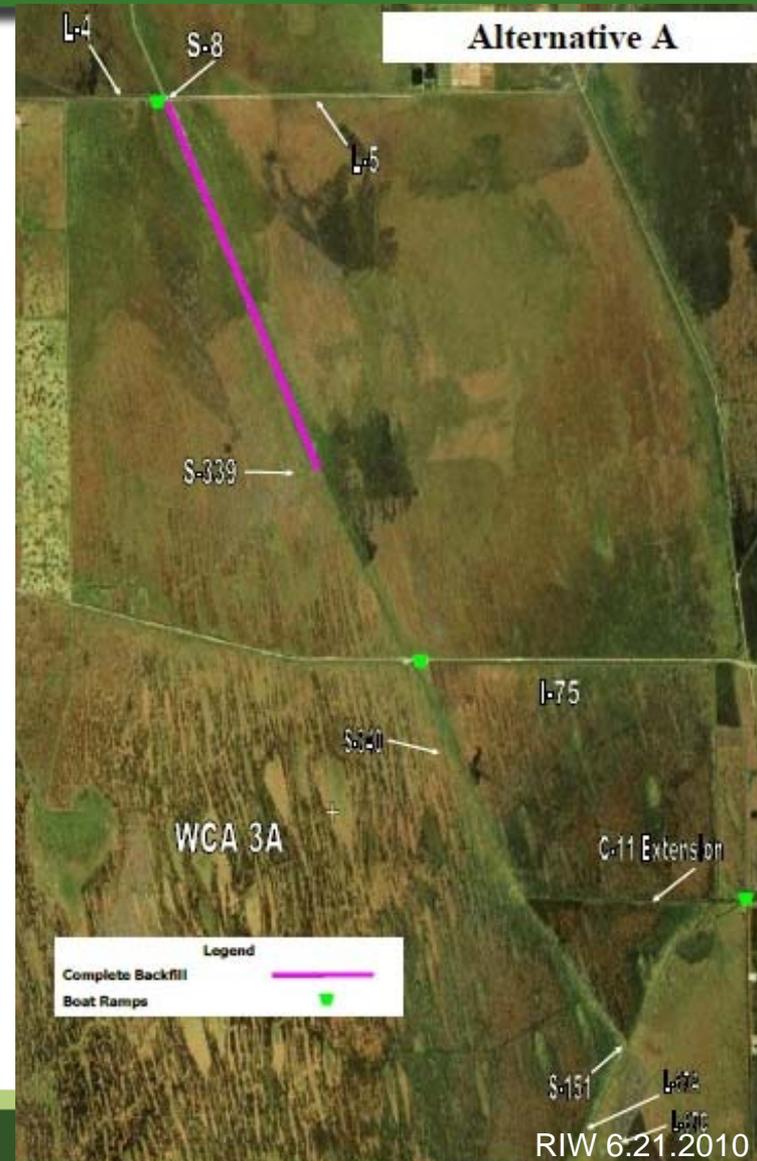
Miami Canal Alternative P

- Complete backfilling of north section and central sections using all available on-site fill material and importing additional fill that is required.
- *This alternative ranked the highest for the midsize alternatives to complete the full range of alternatives, as required by USACE and NEPA planning guidance. This alternative focuses on the high priority north (for the purposes of reducing dryouts in northern WCA-3A). It also includes the central section for comparative modeling purposes.*



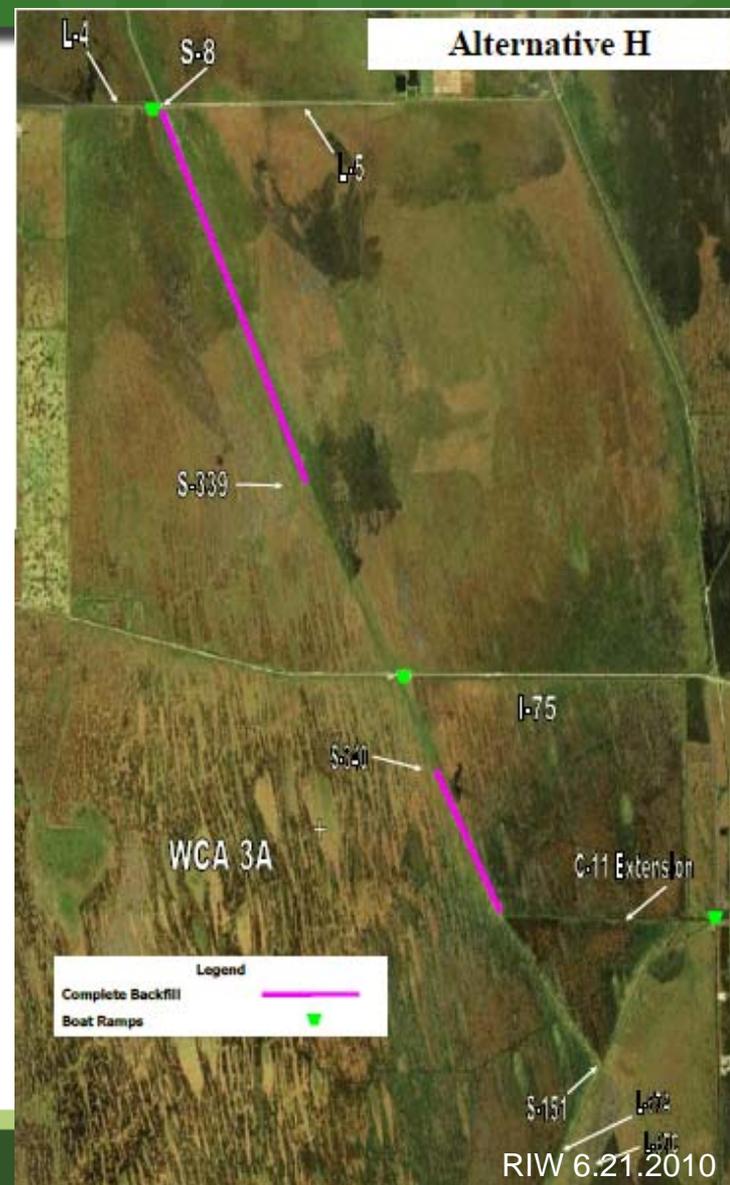
Miami Canal Alternative A

- Complete backfill of north section, from S-8 to S-339. Use available on-site fill material to completely fill the north section (S-8 to S-339) of the Miami Canal.



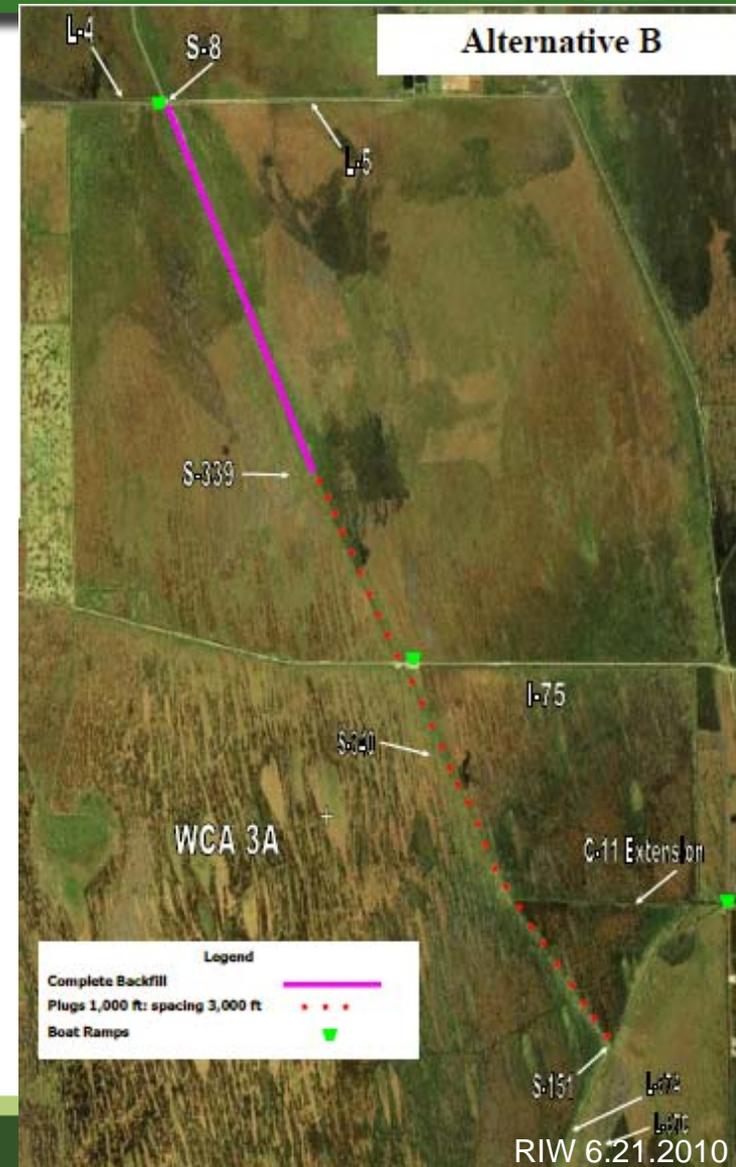
Miami Canal Alternative H

- Complete backfilling of north section and complete backfilling of a portion of the south section starting from C-11 extension toward S-340, after which time excess fill from the south could be pushed into the adjacent canal. Use on-site fill material.
- This alternative ranked 9th, however, it provides backfilling of the two segments of the canal thought to yield a reduction in dryouts in northern WCA-3A and a reduction in ponding in southern WCA-3A based on 2x2 model output, while reducing the uncertainties associated with using plugs.*



Miami Canal Alternative B

- Complete backfilling of north section
- Plug central and south (entire southern reach), with 1,000 ft plug and 3,000 ft spacing
- If necessary, the size of the plug may be larger to utilize all available on-site fill material



Miami Canal Alternative B (Cont.)

- *Best Combination of Complete Fill and Plugging: This alternative represents a combination of backfill and plug configurations. The 2x2 model output suggests that backfilling the northern segment produces benefits of reducing dryouts in northern WCA-3A. By using full backfill in this segment, uncertainties associated with plugs are reduced.*
- *Plugging the remainder of the Miami Canal potentially allows for the additive benefits of a full extent backfill to be achieved at a lower cost than alternative I/K (full backfill of the entire canal). The RMA-2 modeling results identified one of the best plug length/spacing ratio to be 4,000:2,000, when fill is not limited to the project site and 1,000:3,000 was one of the best plug/spacing combinations, when fill material is limited to the project site.*



Miami Canal Alternative X/FF

- Plug the north, central and south (S-340 to C-11 extension) sections with plugs
- Initiate plugs at north and south terminus of Miami Canal proceeding symmetrically from both ends until need to shift to smaller 1,000 ft plugs and 3,000 ft spacing based on available fill
- Use all available on-site fill material
- No additional fill will be imported



Miami Canal Alternative X/FF (Cont.)

- *Best Complete Plug Using Available Fill: This alternative is a hybrid modification of previous alternatives X and FF. The north and south (S-340 to C-11 extension) sections proved to be the best areas to backfill in order to reduce dryouts and ponding respectively from the 2x2 modeling of conceptual alternatives.*
- *The RMA-2 modeling results identified one of the best plug length/spacing ratio to be 4,000:2,000, when fill is not limited to the project site. The 1,000:3,000 was one of the best plug/spacing combinations, when fill material is limited to the project site. Detailed design will determine the break points in the North and South for using 4,000:2,000 plug length/spacing with available fill, and then transitioning to using 1,000:3,000 plug length/spacing in the central section.*

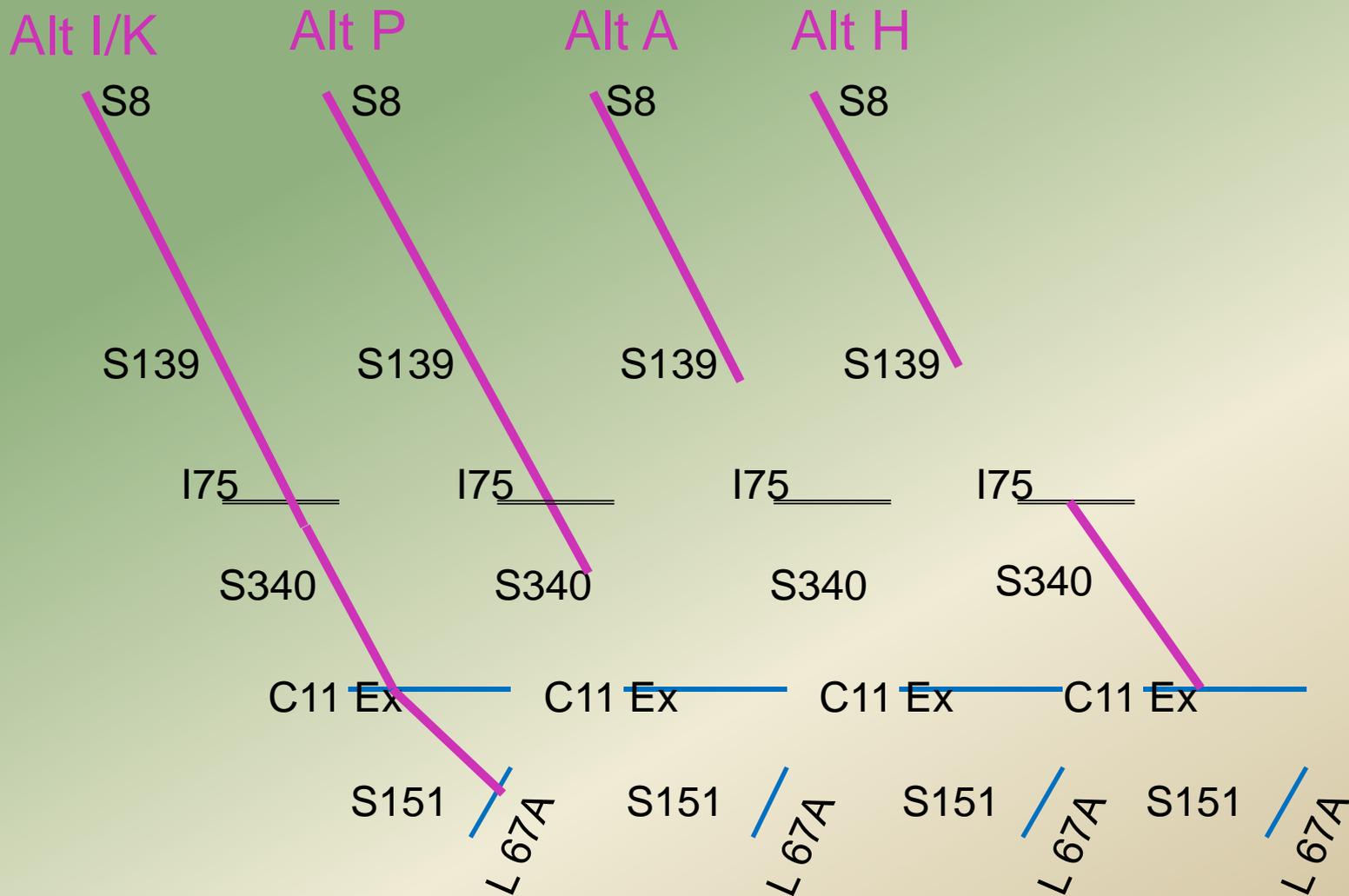


Miami Canal

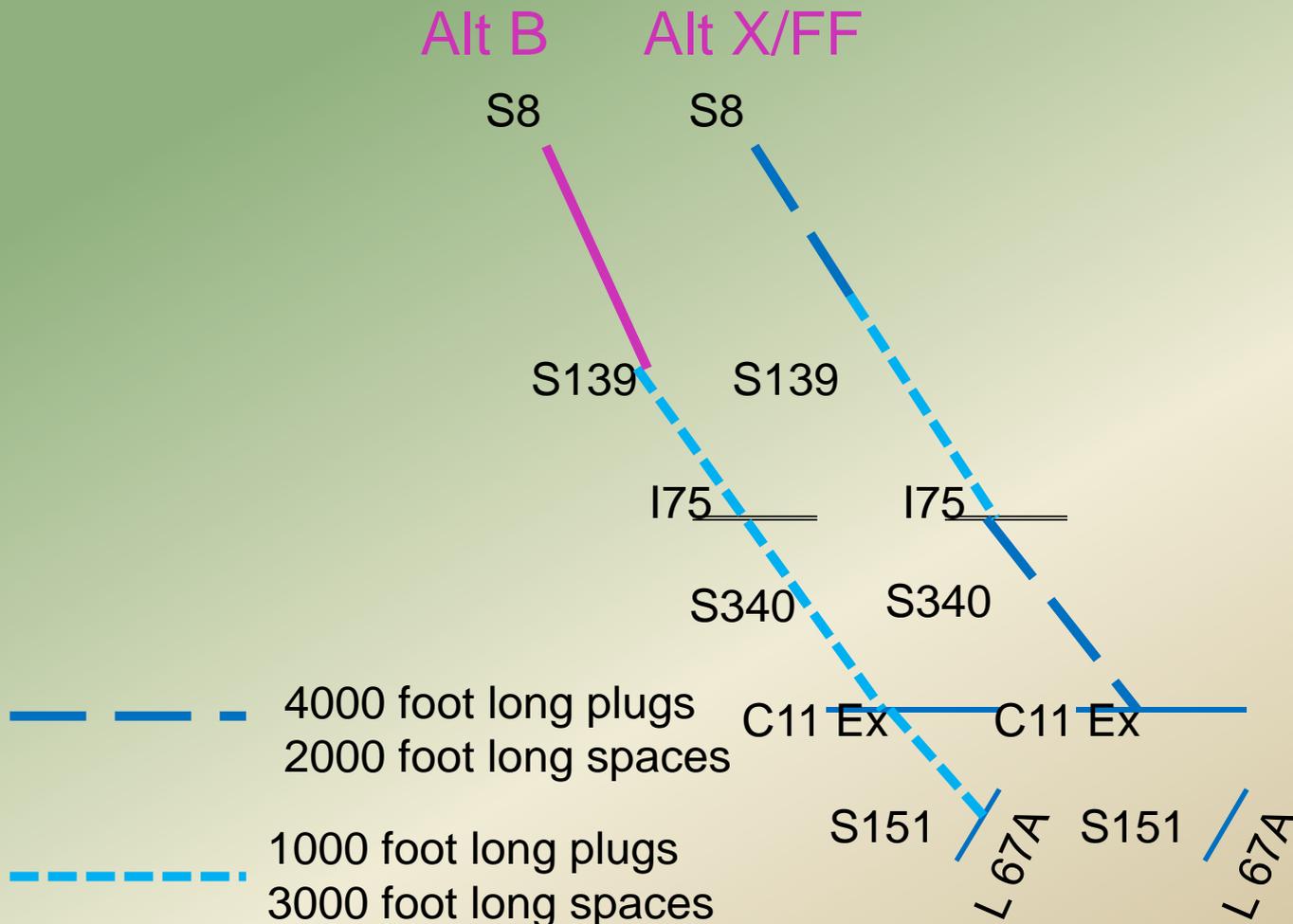
- Understanding stakeholders' view of the conceptual alternatives
 - How will alternatives effect fishing access
 - Where do people access most
 - Most prominent boats used
 - Where do people fish most
 - Other effected recreation
 - Other means of access



Potential Alternatives - Backfill Without Plugs



Potential Alternatives - Backfill With Plugs





Questions?