



May 14, 2019

Draft Regional Beneficial Use Testing Manual

Environmental Evaluation and Management of Dredged Material for Beneficial Use: A Draft Regional Manual for the Great Lakes

- ✓ Objective is to support beneficial use of dredged material by developing a standard and agreed upon set of ground rules for evaluating the environmental suitability of dredged material for beneficial uses.
- ✓ Recognizing that beneficial use of dredged material projects support regional remediation and restoration efforts throughout the Great Lakes

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Draft manual time line

- October 2016: Initial draft released to GLDT
- 2017: Responses to comments and discussions with GLDT (on all sections/topics except Section 5 - aquatic placement)
- March 2019: Revised document and responses to comments on Section 5 provided to GLDT
- *What is a reasonable timeframe to collaborate on final revisions?*

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Next Steps:

- Requesting GLDT review and feedback on all document revisions.
- Collaborate on final revisions
 - Major comments / revisions in Sections 4 (risk-based approach) and 5 (aquatic pathway evaluations)
 - State-based guidance and policies are in Appendix B: Can we harmonize with federal agency approach?



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Summary of most significant comments and revisions

Risk based approach (Section 4)

- ❖ Concern regarding statements that “ecological and human health risks should be weighed in light of project benefits”
- Section 4 provides a framework for characterizing risks and benefits (consistent with USEPA guidance)
- Conceptual site models identify exposure pathways
- Tiered approach used to focus resources on exposures contributing to risks and/or associated with uncertainties
- Supports options for managing risks and uncertainties (elaborated on in Section 7)

Aquatic Placement

LEGEND

- Receptors
- Exposure Routes
- Placed Dredged Material
- Existing Sediment

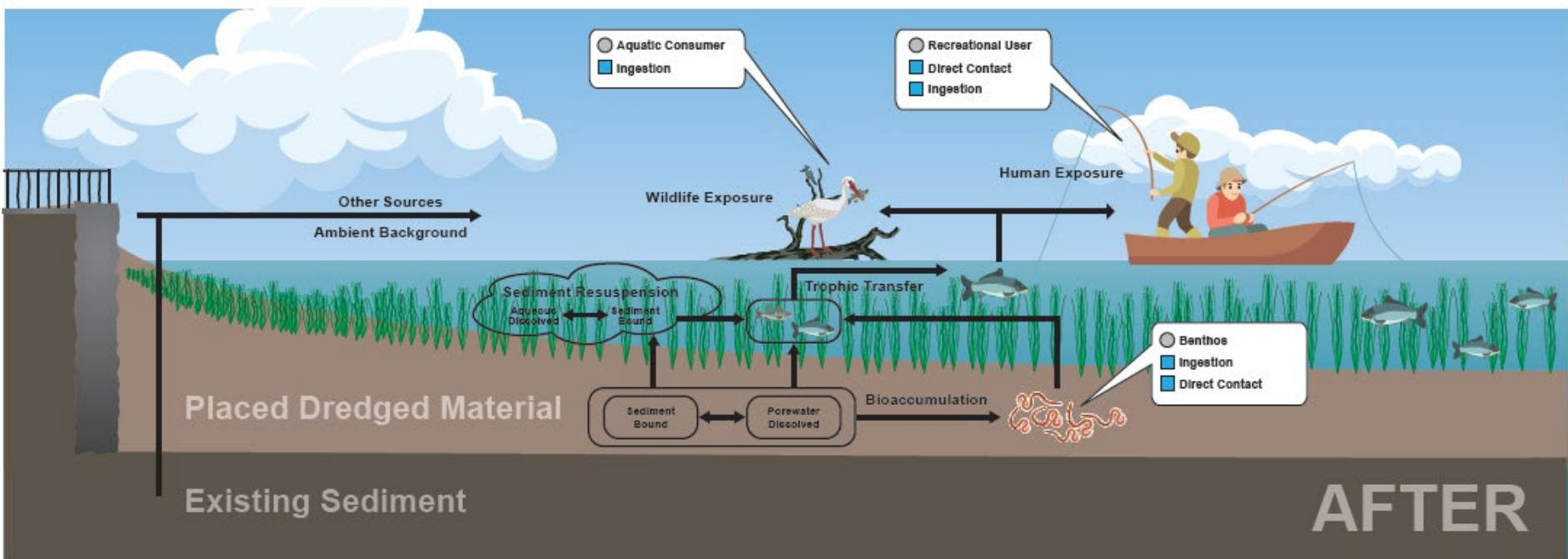
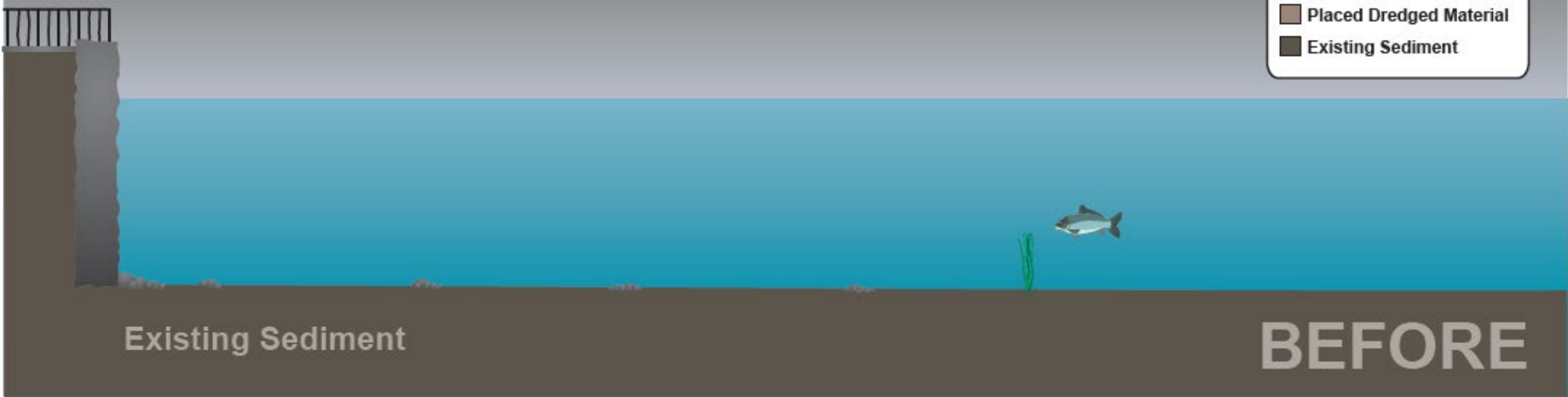


Figure 4-2. Generalized Conceptual Model for Dredging Operations at Beneficial Use Aquatic Placement Sites.

Upland Nature Preserve

LEGEND

- Receptors
- Exposure Routes

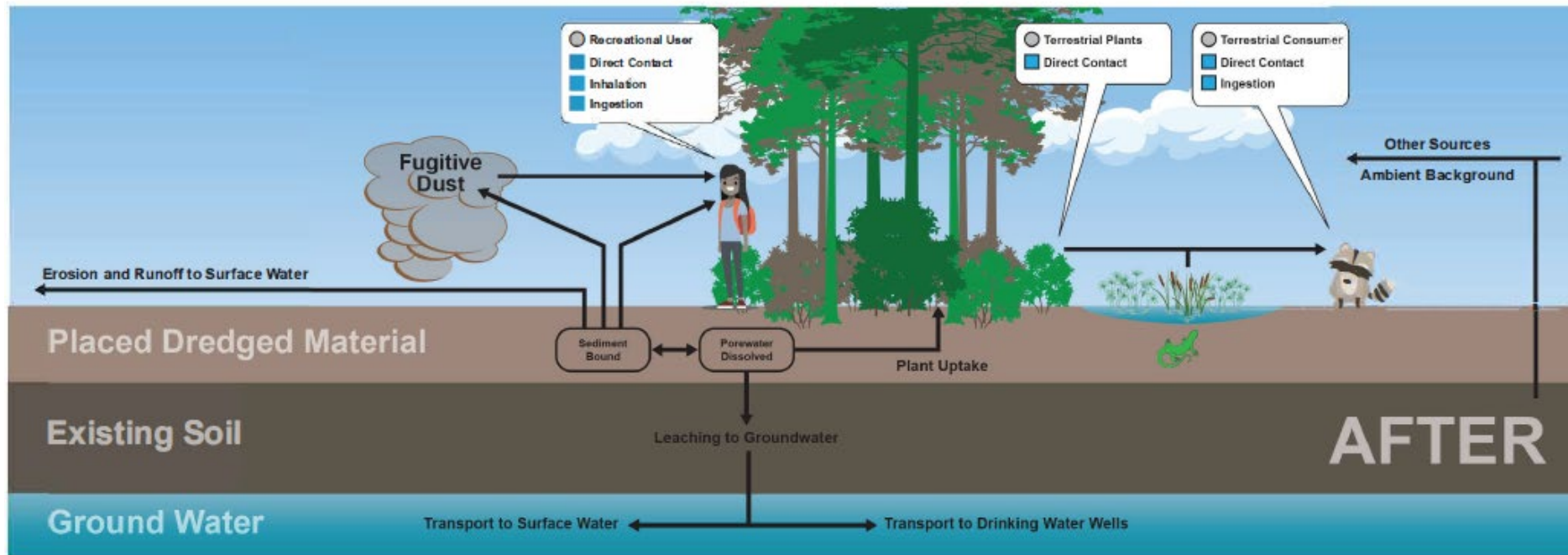


Figure 4-3. Generalized Conceptual Model for Dredging Operations at Beneficial Use Upland Placement Nature Preserve Sites.

Agricultural Field

LEGEND

- Receptors
- Exposure Routes
- Placed Dredged Material
- Existing Soil



BEFORE

Existing Soil

Ground Water

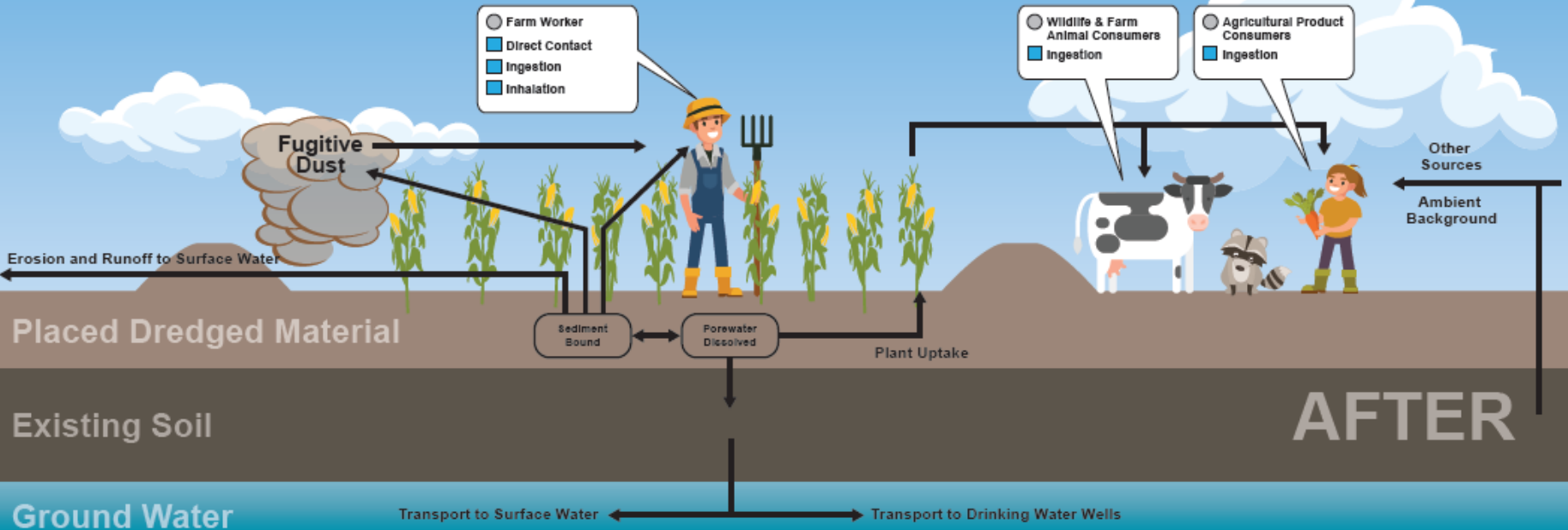


Figure 4-4. Generalized Conceptual Model for Dredging Operations at Beneficial Use Upland Placement Agricultural Field Sites.

Upland Brownfield Placement

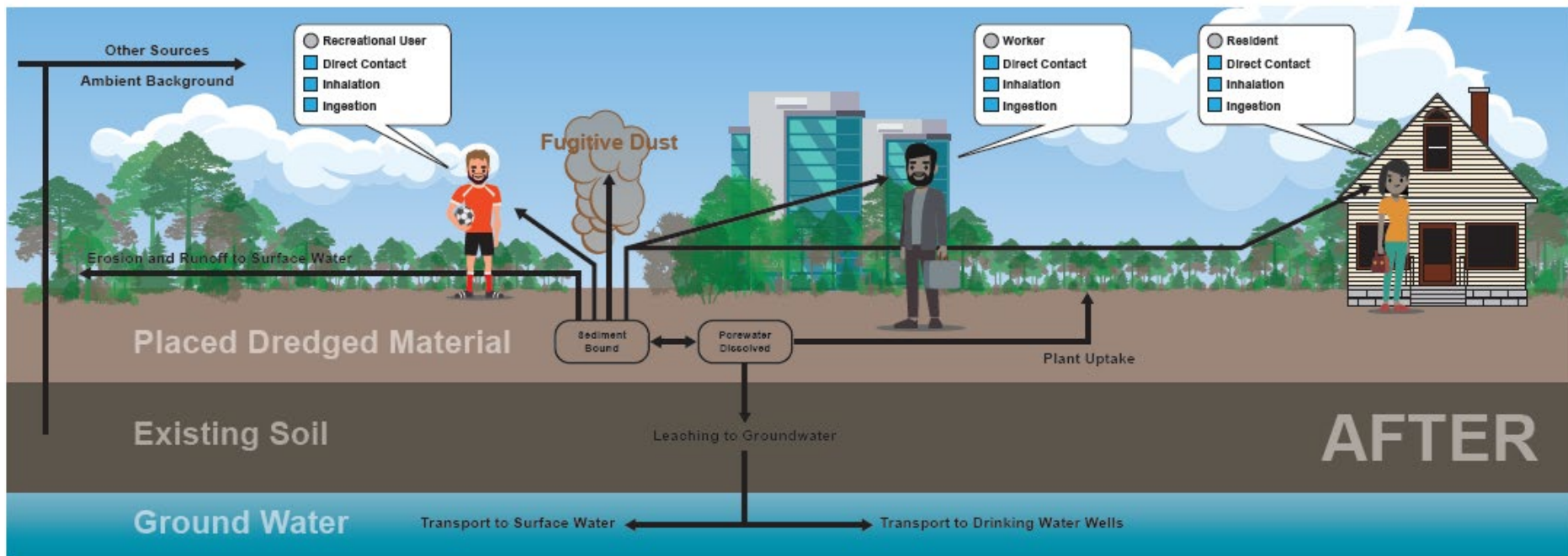


Figure 4-5. Generalized Conceptual Model for Dredging Operations at Beneficial Use Aquatic Placement Commercial, Residential, or Athletic Field Sites.

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Aquatic pathway evaluations (Section 5)

- ❖ Concern regarding presentation of evaluations that had not been included in *Inland* or *Great Lakes Testing Manuals* (1998), especially regarding interpretation of bioaccumulation bioassays
- Sediment evaluation guidance directed at compliance with CWA Section 404(b)(1) Guidelines
 - Follows *Inland* and *Great Lakes Testing Manuals* (1998)
- 2016 draft included some quantitative approaches to inform the interpretation of bioaccumulation bioassays
- 2019 revisions did not include the above approaches



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Thoughts?