

**Proposed Revisions to the
Surface Water Classification
System in Chapter 62-302, F.A.C**

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Summary of Presentation

- **The Big Picture**
 - What we are doing with this rulemaking
 - What we are NOT doing with this rulemaking
- **Proposed Rule Language**
 - **Refined Classification System**
 - **Criteria Tables**
- **Background Information about New Uses**
 - **Examples**
 - **Examples**
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What we are doing with this rulemaking

- Propose to refine the classification system
 - Change from system with 5 classes that combines both human uses and aquatic life uses to a new system with 7 human use classes and 4 aquatic life use classes
- Also revising process for reclassifications
- Will also populate the criteria for the existing classes into the new structure
 - New system includes classes that are analogous to old system, but also includes new classes

Proposed Human Uses (HU)

- HU 1** Protection of potable water supply suitable for human consumption (following conventional drinking water treatment methods), fish consumption, and full body contact.
- HU 2** Protection of shellfish harvesting for human consumption, fish consumption, and full body contact.
- HU 3** Protection of fish consumption and full body contact.
- HU 4** Protection of fish consumption and incidental human contact.
- HU 5** Protection of fish consumption, but human contact limited or restricted due to unsafe physical conditions.
- HU 6** Protection of waters for crop irrigation or consumption by livestock.
- HU 7** Utility and industrial uses

Proposed Aquatic Life (AL) Uses

- AL -1** Propagation and maintenance of aquatic communities that approximate the biological structure and function of natural background.
- AL -2** Propagation and maintenance of a healthy, well-balanced aquatic community with minimal deviation of biological structure and function relative to natural background.
(Default)
- AL -3** Protection of an aquatic community with moderate deviation of biological structure and function relative to natural background
(habitat and hydrology limitations)
- AL -4** Protection of an aquatic community with substantial deviation of biological structure and function relative to natural background
(severe habitat and hydrology limitations)

What we are doing with this rulemaking

(continued)

➤ “Cross-walked” existing classes

Existing Class	Proposed Human Use	Proposed Aquatic Life Use
Class I	HU-1	AL-2
Class II	HU-2	AL-2
Class III	HU-3	AL-2
Class IV	HU-6	Addressed in HU-6
Class V	HU-7	N/A

- HU-4 and HU-5 are proposed to represent different expectations associated with recreational contact
- AL-1 is proposed to help protect exceptional waters, while AL-3 and AL-4 are proposed for waters with different biological expectation due to natural, hydrologic, or physical/habitat limitations

What we are NOT doing with this rulemaking

- **We are not reclassifying any waters or changing their level of protection**
- **Before any reclassifications can occur to any new class (HU-5, HU-6, AL-1, AL-3, or AL-4), we will need to:**
 - **Adopt the revised classification system (as part of this rulemaking)**
 - **Develop new criteria**
 - **Approve reclassification**
- **Each component must be adopted by ERC and approved by EPA**

Revisions to Rule 62-302.400 Classification of Surface Waters, Usage, Reclassification, Classified Waters

- **In subsection (1), split uses into human and aquatic life uses**
 - **Uses are fairly straightforward for human uses, but aquatic life use is tied to biological expectation relative to natural background**
 - **Russ will review each use and give examples**
- **Revisions to (3) and (4) are just to update text to reflect new classification system**

Revisions to Rule 62-302.400

(continued)

- **Subsections (6) through (8) describe reclassification process,**
 - **Revised (6) to note that DEP can initiate**
 - **No changes to (7)**
 - **Subsection (8) combined text in old (8) and (9) and requires reclassifications to be noticed and adopted by ERC only upon finding:**
 - **Will establish the present and future most beneficial use**
 - **Is in the public interest, and**
 - **Proposed use is attainable**

Revisions to Rule 62-302.400

(continued)

- **Subsection (9) lists requirements for reclassifications to less restrictive use**
- **Must demonstrate that:**
 - **None of the uses being removed are existing uses,**
 - **The uses to be removed would not be attained by implementing effluent limits required by CWA and best management practices for nonpoint sources, and**
 - **One of the following prevent attainment of the use**
 - **Naturally occurring pollutants,**
 - **Natural, ephemeral, intermittent or low flow conditions or water levels,**

Revisions to Rule 62-302.400

(continued)

- One of the following prevent attainment of the use
 - Human caused conditions or sources of pollution that cannot be remedied or would cause more environmental damage to correct,
 - Dams, channelization, diversions, flood control pumps or other hydrologic modifications AND it is not feasible to restore the waterbody,
 - Physical conditions related to natural features of the waterbody, such as lack of proper habitat, hydrologic regime, or physical morphology, unrelated to water quality,
 - Controls more stringent than required by sections 301(b) and 306 of the CWA would result in substantial and widespread economic and social impact

Revisions to Rule 62-302.400

(continued)

- Revisions to (10) are to update text to reflect new system and also clarifies that Outstanding Florida Water (OFW) and Outstanding National Resource Water designations are not designated use classifications
- Revisions to Subsection (12), which lists the exceptions to the default classification, are to update text to reflect new system
 - Human Use 3 and Aquatic Life Use 2 are the default categories


Revisions to Rule 62-302.530

- **Current table split into 3 tables**
 - **One for Human Uses, and two for Aquatic Life Uses**
 - **Split into two Aquatic Life Use tables to emphasize that ALL aquatic life classes include criteria for toxics**

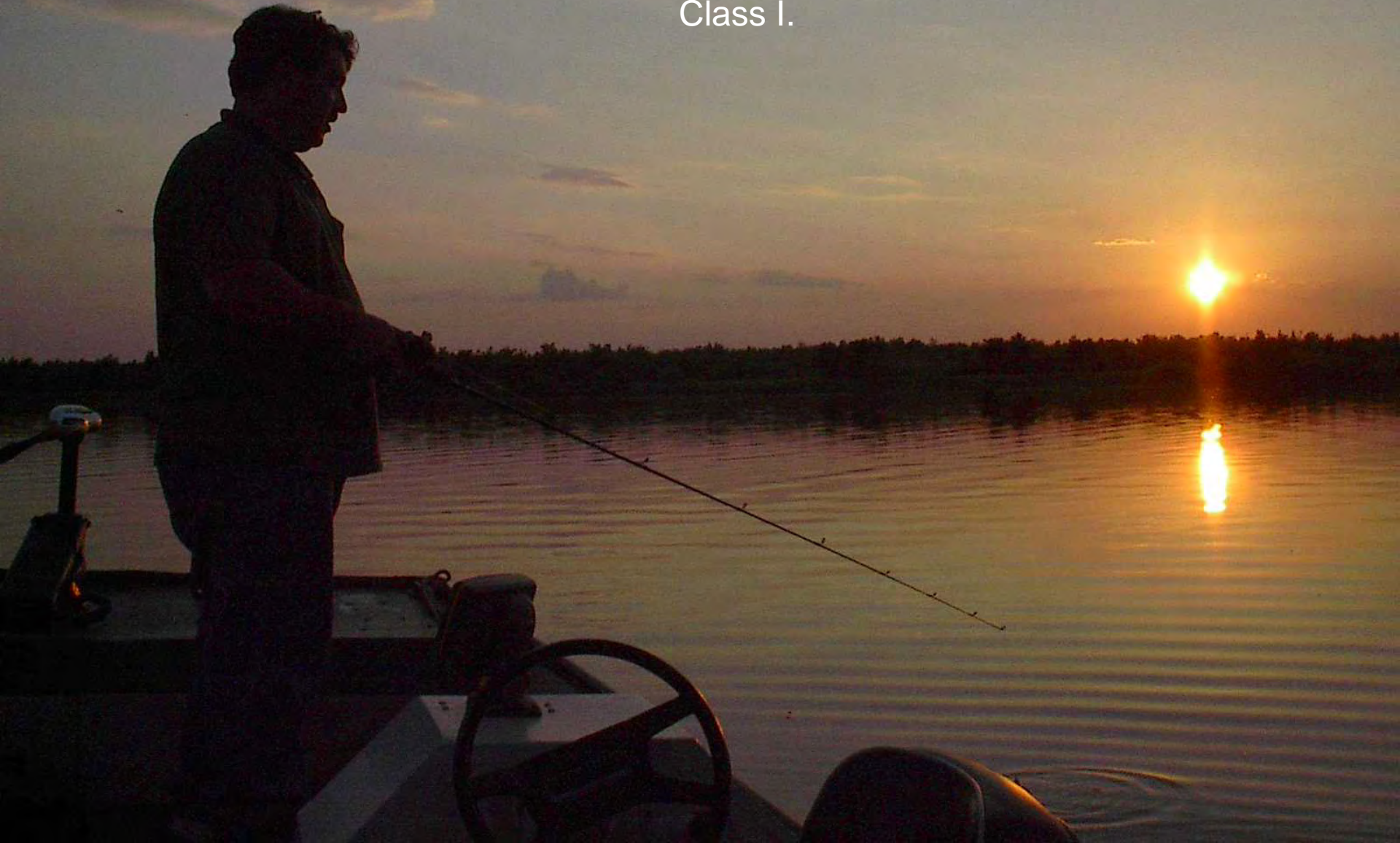
Proposed Human Uses (HU)

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The following slides are intended to help visualize current concepts associated with the proposed classification system. They are provided as examples only, and no waters will be reclassified without following the process described above.



HU-1 Potable Water Supply
Maintaining a level of water quality suitable
for potable water or intended to be suitable
with conventional treatment. Formerly
Class I.



HU-2 Shellfish Harvesting

Water shall contain no substances in concentrations that will make shellfish inedible due to undesirable tastes or would cause a hazard to humans after consumption.



HU-3 (Fresh) Default class. Full contact recreational uses and fish consumption.



HU-3 (Marine) Default class. Full contact recreational uses and fish consumption.



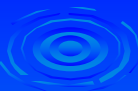
HU-4 Protection of fish consumption and incidental human contact.



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HU-4 Example Issues

- The following exist and cannot be remedied:
 - Steep slopes preclude easy access
 - Shallow depths preclude full body immersion
 - During flood conditions, high velocities make swimming dangerous



HU-5 Protection of fish consumption, but human contact limited due to restricted /unsafe physical conditions.



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HU-6 Agricultural Use. Maintaining a level of water quality useful for consumption of water by livestock or surface water withdrawal for application onto cropland.



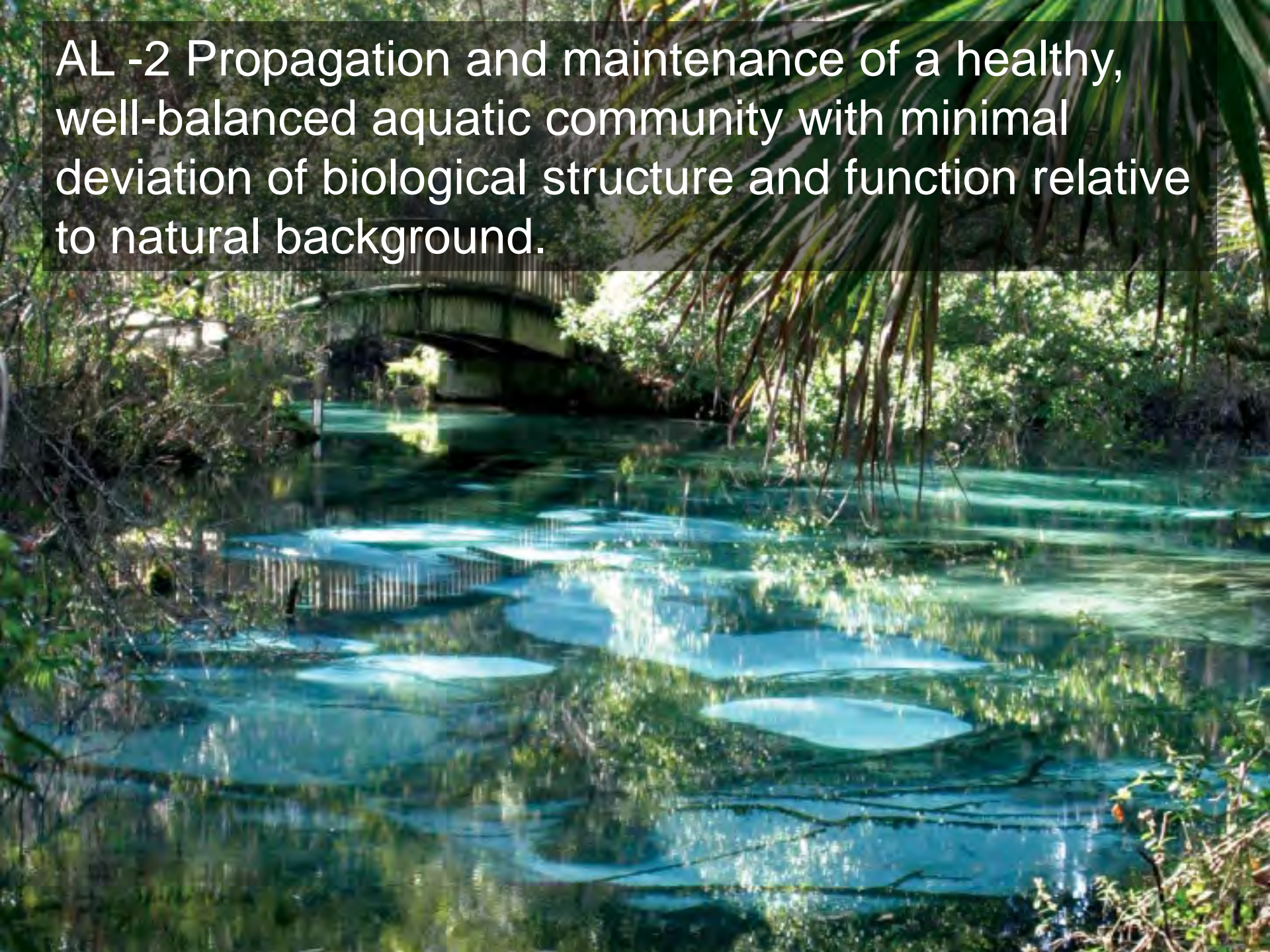
Proposed Aquatic Life (AL) Uses

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AL -1 Propagation and maintenance of aquatic communities that approximate the biological structure and function of natural background.



AL -2 Propagation and maintenance of a healthy, well-balanced aquatic community with minimal deviation of biological structure and function relative to natural background.



AL -3 Aquatic community with moderate deviation of biological structure and function relative to natural background .



Potential AL-3 Example Issues

➤ The following exist and cannot be remedied:

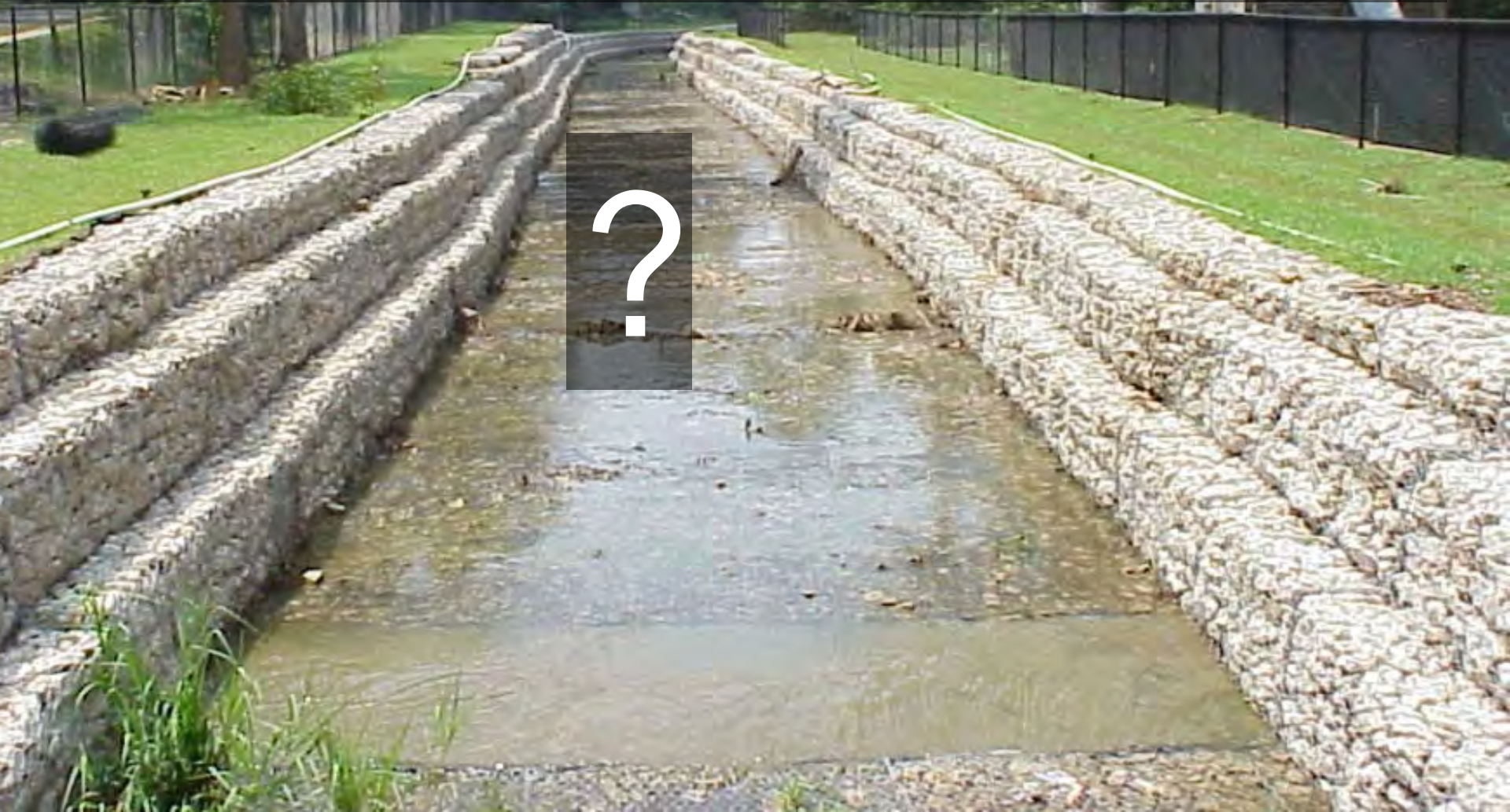
- Man-made or altered, habitat limited
- Primary habitat is shoreline vegetation, which is periodically removed (dredged, etc.)
- Hydrologic modification



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AL -4 Aquatic community with substantial deviation of biological structure and function relative to natural background (severe habitat and hydrology limitations).



Potential AL-4 Examples

➤ The following exist and cannot be remedied:

- Man-made or altered
- Artificial hardened shorelines, no habitat
- Shallow & narrow
- Intermittent flow
- Flashy hydrograph



Ohio's Aquatic Life Use System Vs. The Biological Condition Gradient

Levels of Biological Condition

Natural structural, functional, and taxonomic integrity is preserved.

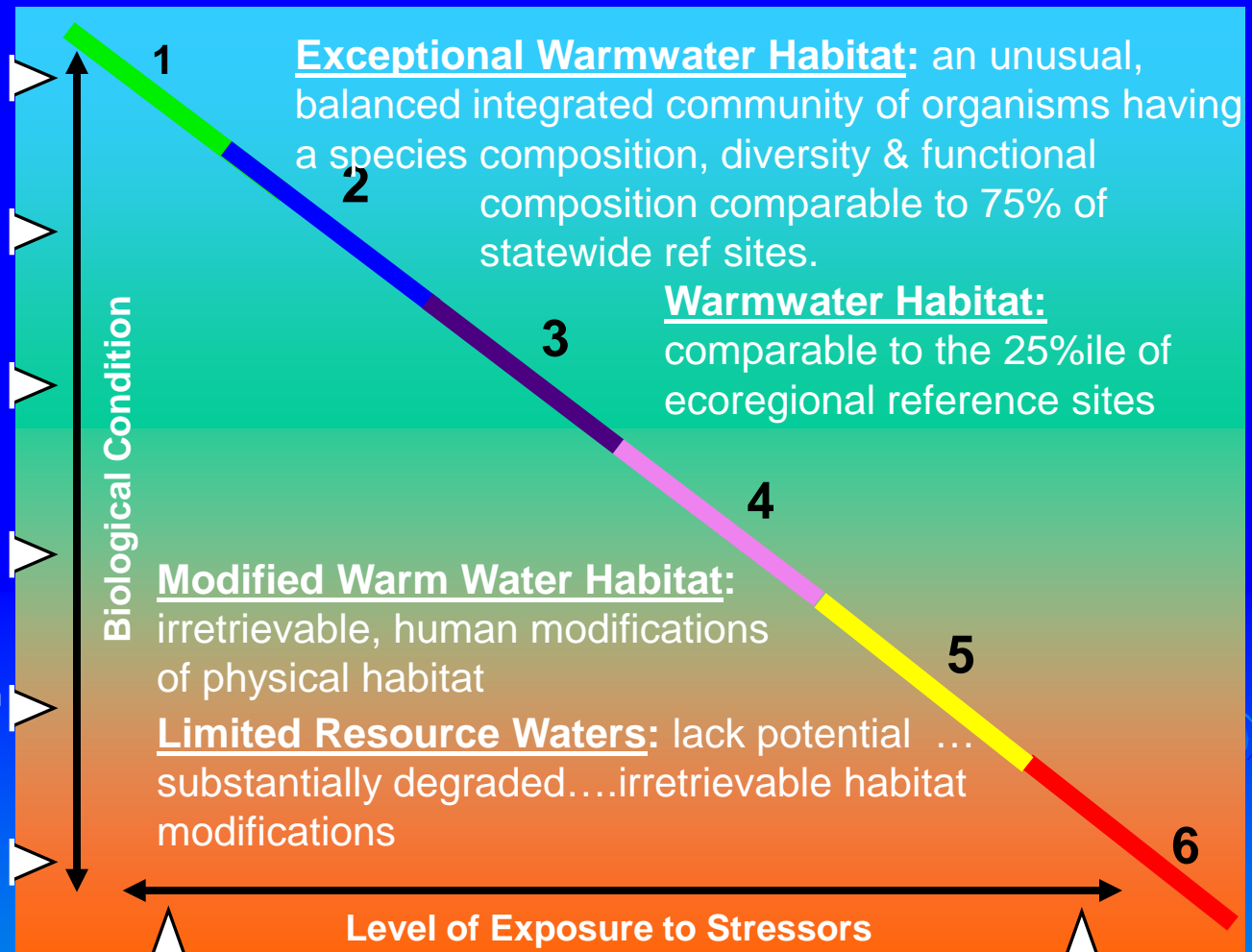
Structure & function similar to natural community with some additional taxa & biomass; ecosystem level functions are fully maintained.

Evident changes in structure due to loss of some rare native taxa; shifts in relative abundance; ecosystem level functions fully maintained.

Moderate changes in structure due to replacement of some sensitive ubiquitous taxa by more tolerant taxa; ecosystem functions largely maintained.

Sensitive taxa markedly diminished; conspicuously unbalanced distribution of major taxonomic groups; ecosystem function shows reduced complexity & redundancy.

Extreme changes in structure and ecosystem function; wholesale changes in taxonomic composition; extreme alterations from normal densities.




Watershed, habitat, flow regime and water chemistry as naturally occurs.

Chemistry, habitat, and/or flow regime severely altered from natural conditions.

Same Stream, Same Water Quality: Different Biological Expectations



Conclusions

- Classification system is the fundamental basis for water quality protection programs
 - Revised system would enable citizens, organizations, and state and local governments to:
 - identify waters meriting higher use protection, and
 - more precisely focus restoration efforts on goals that provide the best environmental benefit.
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- The background of the slide features several concentric, light blue circular ripples that resemble water droplets hitting a surface, scattered across the bottom half of the slide.