

Recreational Use Attainability Analysis Protocol

Water Protection Forum Advisory Group

April 19, 2007



Department of Natural Resources
Water Protection Program
Water Pollution Control Branch

Recreational Use Attainability Analysis Protocol

Use Attainability Analysis (UAA) - a structured, scientific assessment of the factors affecting the attainment of the use, which may include physical, chemical, biological, and economic factors.

Recreational Use Attainability Analysis Protocol

- UAA Protocol
- “The Protocol”

Recreational UAA Protocol – Version 1.0

Recreational UAA Protocol developed to consider
“Natural, ephemeral, intermittent or low flow conditions”
[40 CFR 131.10(g)(2)].

Adopted by the Missouri Clean Water Commission on
November 3, 2004.

Contained criteria to determine whether a given classified
water body maintained conditions that would support the
whole body contact recreation designated use.

Recreational UAA Protocol – Version 1.0 (cont.)

In order to support whole body contact recreation, a maximum depth of at least one (1.0) meter (3.28 feet) in the deepest pool or an average depth of at least one-half (0.5) meter (1.64 feet) must be maintained during base flow conditions ... The average depth criterion is met if more than 50 percent (%) of all of the water surveyed from an observation point is at least 0.5 meter in depth.

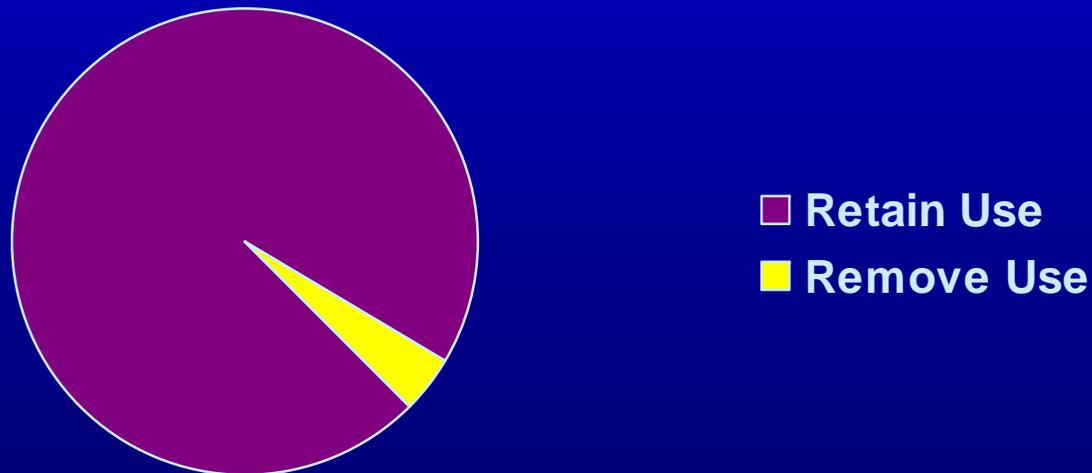
If the field survey or public notice uncovered an “existing use”, it was recommended the water body be designated for whole body contact recreation.

Recreational UAA Protocol – Version 1.0 (cont.)

Results of Use Attainability Analyses conducted using
Recreational UAA Protocol – Version 1.0

Retain Use – 21,311 miles (96 %)

Remove Use – 920 miles (4 %)



Recreational UAA Protocol – Version 1.0 (cont.)

Recreational UAA Protocol – Version 1.0

- ◆ Designed to balance a structured, scientific approach with ease of implementation.
- ◆ On October 31, 2006 EPA notified the state that new or revised water quality standards were needed on 99 water bodies.
- ◆ Enough ambiguity in the protocol to not guarantee reproducible results.

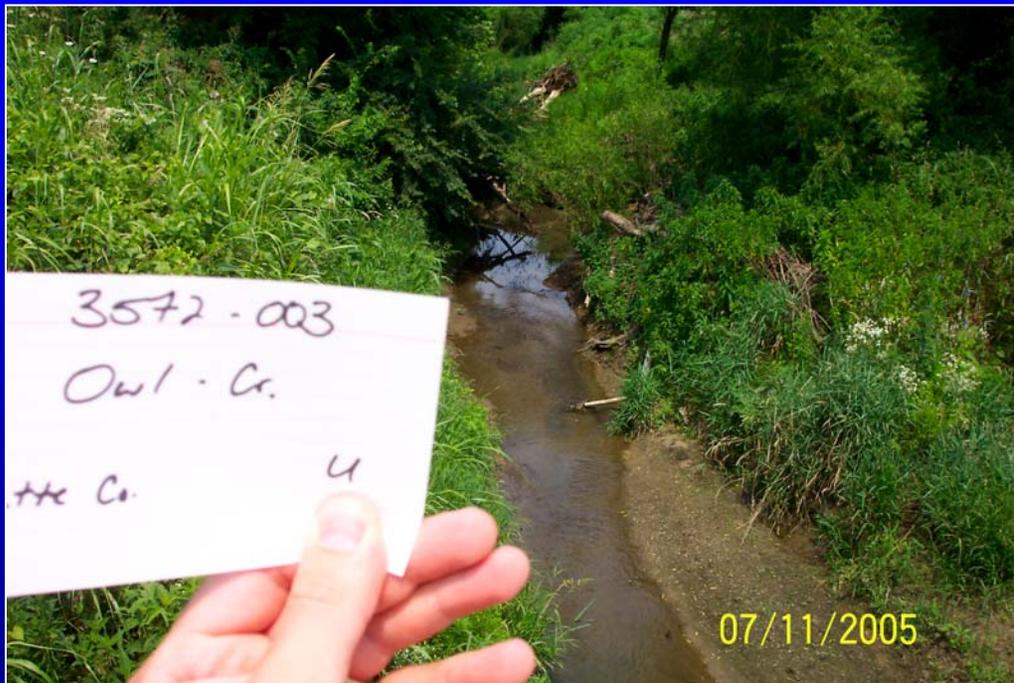
Recreational UAA Protocol – Version 1.0 (cont.)



“Perverse Outcomes”

**Bachelor Creek
Franklin County**

Recreational UAA Protocol – Version 1.0 (cont.)



“Perverse Outcomes”

**Owl Creek
Platte County**

Recreational Use Attainability Analysis Protocol

Water Protection Program staff requested input from members of the Missouri Clean Water Commission and interested stakeholders on January 9, 2007.

Areas of concern raised during the public meeting were:

- ◆ Representativeness of sites selected for the UAA
- ◆ Interviews and documentation of an existing use
- ◆ Significance of data collected or observed in the field

Recreational Use Attainability Analysis Protocol

Water Protection Program staff reviewed the UAA protocol and focused on improving the document to address those areas of concern discussed at the public meeting.

Improve only those areas of the protocol necessary to begin conducting UAAs at the start of the recreational season (April 1, 2007).

Recreational UAA Protocol – Version 2.0

Recreational UAA Protocol – Version 2.0

Version 2.0 addresses the representativeness of survey sites selected through the following improvements:

- ◆ UAA Training and pre-assessment meetings.
- ◆ Requires a more even distribution of survey sites.
- ◆ Requires more rigorous characterization of stream morphology.

Recreational UAA Protocol – Version 2.0 (cont.)

Version 2.0 addresses interviews and documentation of an existing use through the following improvements:

- ◆ Interview process has been improved to allow the collection of more detailed information.
- ◆ Field survey and interview forms have been modified to facilitate better collection and documentation of information.
- ◆ Broader public participation process when the removal or downgrading of a designated use is recommended.

Recreational UAA Protocol – Version 2.0 (cont.)

Version 2.0 addresses the significance of data collected or observed in the field through the following improvements:

- ◆ Requires that field surveys avoid hydrologically temporal anomalies (e.g. root wads and beaver or debris dams).
- ◆ Requires that field surveys and interviews collect data sufficient to determine an attainable or existing use.

Recreational UAA Protocol - Version 2.0

Recommendations

- ◆ Retain the original Recreational UAA Protocol attainability criteria with minor clarification (change “average” to “median”).
- ◆ Incorporate USGS methods for characterizing stream morphology.
- ◆ Redo UAAs on the 99 waters and revisit UAAs conducted after the last rulemaking.

Recreational UAA Protocol - Version 2.0

Considerations

- ◆ Increased data and information requirements will reduce the number of Recreational UAAs conducted.

However,

- ◆ The department will be in a stronger position to respond to EPA and defend the results of future UAAs.
- ◆ The department will not need to revisit NPDES permit decisions made on the results of earlier UAAs.