

Bureau of Water Quality Planning

Fact Sheet: Designated Uses for Channels Tributary to Las Vegas Wash (R115-22)

What is the Current Status of Uses for the Channels Tributary to the Las Vegas Wash?

The channels that are tributary to Las Vegas Wash have not previously been assigned their own designated beneficial uses. Instead, the beneficial uses and criteria of the Las Vegas Wash, under Nevada Administrative Code (NAC) 445A.2156, have been extended upstream by applying NAC 445A.1239 (Control Points), which is informally known as the "tributary rule."

The Las Vegas Wash, to which the channels are tributary, is currently divided into three reaches. The upper reach begins at the origin and ends at the confluence of Sloan Channel and Las Vegas Wash; this upper reach does not have its own standards, so the standards from the middle reach (NAC 445A.2156) are applied via the tributary rule. The middle reach begins at the confluence of Sloan Channel and Las Vegas Wash and extends to a feature known as the "Historic Lateral." The lower reach (NAC 445A.2158) begins at the Historic Lateral and extends downgradient (and in pipes beneath Lake Las Vegas) to Lake Mead.

The standards table under NAC 445A.2156 provides the beneficial uses and criteria applicable to the middle reach of Las Vegas Wash. These standards extend upstream to upper Las Vegas Wash and other channels via the tributary rule. However, NDEP has determined that the beneficial uses and criteria of the middle segment (NAC 445A.2156) are not appropriate for the channel's tributary to the Las Vegas Wash. The nature and condition of these channels are radically different from the middle reach of the Las Vegas Wash.

Prior to development of the City of Las Vegas, the tributaries were ephemeral washes that did not host aquatic life. Typically, flow in such desert washes occurs in response to monsoon storms, which produce flash floods. Since expansion of the city, the tributary channels have been engineered as flood-conveyance channels, with concrete lining throughout much of the channels. The beneficial uses and criteria under NAC 445A.2156 are not appropriate for these engineered flood-conveyance structures. The proposed regulation sets forth beneficial uses and criteria that are better suited to these tributary channels.

What Changes are in the Proposed Regulation?

The regulation proposes to designate beneficial uses to flood-conveyance channels tributary to the Las Vegas Wash for the first time. The uses appropriate for these channels are RNC and PWL, as described below.

- Recreation Not Involving Contact with Water (RNC). The flow in the concrete-lined channels is persistent, but far too shallow for immersion. Median dry-weather flows range from <1.0 to 8.6 cubic feet per second (cfs) and are typically less than a few inches deep. Wet-weather flows are characterized by flash flood events when it is unsafe to be in any channel. The Clark County Regional Flood Control District (CCRFCD) has made every effort, from public service messaging to tall fences, to keep people out of the flood-conveyance channels. However, incidental contact of people with these waters warrants RNC as a use.
- **Propagation of Wildlife (PWL)**. Despite fencing and other efforts to keep both animals and humans out of the flood channels, this beneficial use acknowledges that wildlife in and around the city of Las Vegas can enter the tributary channels. Urban wildlife, including birds, coyotes, raccoons, skunks, and other animals are likely to enter the flood-conveyance channels from time to time.

How are Beneficial Uses Determined?

Designated uses are specifically assigned (designated) to a water body in the NAC for protection with corresponding water quality criteria.

- Designated uses may or may not be existing uses.
- After a use is designated in a state's standards, it receives specific regulatory protection.
- A "use attainability analysis" (UAA) can be used to establish designated uses that do not include aquatic life and contact recreation, but only if these are not existing and not attainable uses.

Existing uses are those in existence on or after November 28, 1975, whether or not they have been designated in the NAC.

Attainable uses are those that can be attained by effluent limitations (point sources) and cost-effective best management practices (nonpoint sources).



Exclusionary fencing along Flamingo Wash. (Photo by CCRFCD).

What Does a Use Attainability Analysis (UAA) Consider?

Under 40 CFR 131.10(g), states may remove a designated use that is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because of any of the following:

- 1. Naturally occurring pollutant concentrations prevent the attainment of the use; or
- 2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
- 3. Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
- 4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
- 5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- 6. Controls more stringent than those required by sections 301(b) and 306 of the [Clean Water] Act would result in substantial and widespread economic and social impacts.

Summary

The regulatory petition and accompanying rationale propose a new water quality standards table, with the designated beneficial uses of RNC and PWL for flood-conveyance channels tributary to the Las Vegas Wash. Channels to be covered under the proposed water quality standards table include those with assessment unit designations, which include Duck Creek, Flamingo Wash, Las Vegas Creek, Pittman Wash, Tropicana Wash, Sloan Channel, and upper Las Vegas Wash. A UAA is provided in the rationale for this petition.

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