

Utah Physa (*Physella utahensis*)**Species Status Statement.**Distribution

This freshwater snail has been documented in Colorado (Boulder and Montrose counties), Nevada (the Humboldt River drainage), Wyoming (Yellowstone National Park and Natrona County), and several counties in Utah (Clarke 1991; Hovingh 2018). In Utah, this species historically occurred in a few springs in northeastern Box Elder County and southwestern Tooele County (Clarke 1991; Oliver and Bosworth 1999). Utah physa also historically occurred in Utah Lake, from which it is now considered extirpated (Clarke 1991; Oliver and Bosworth 1999). Other historical collections indicate that this species was present in four springs in Juab County and one spring in Garfield County, but managers need to confirm the species is still present at these locations (Oliver and Bosworth 1999).

Table 1. Utah counties currently occupied by this species.

<b>Utah Physa</b>
BOX ELDER
GARFIELD
JUAB
TOOELE
UTAH

Abundance and Trends

Clarke (1991) estimated the number of Utah physa present at four locations in Box Elder County in 1990. He estimated that two ponds each had greater than 1 million individuals, one pond had approximately 100,000 individuals, and one pond had more than 100,000 individuals. Oliver and Bosworth (1999) noted that these estimates may have been high. Utah Division of Wildlife surveys in 2012 confirmed the continued presence of Utah physa in several springs in Box Elder County. Recent trends in abundance are unknown.

**Statement of Habitat Needs and Threats to the Species.**Habitat Needs

Utah physa occurs in small, shallow spring-fed pools (Clarke 1991). Clarke (1991) indicated that the pools he visited in Box Elder County were well vegetated and substrate was variable.

### Threats to the Species

The natural rarity of this species makes it sensitive to many potential threats. Local industrial activities have contaminated some occupied localities in Utah; research will determine the mechanisms of physiologic threat posed by various chemicals. Water development and invasive species pose further threats.

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

<b>Utah Physa</b>
<b>High</b>
Industrial and Military Effluents
Small Isolated Populations
<b>Medium</b>
Invasive Wildlife Species - Non-native

### **Rationale for Designation.**

The limited and localized distribution of Utah physa makes it susceptible to natural catastrophes, as well as human activities and non-native species. In order to improve the understanding of the distribution and status of this species in Utah, managers need to conduct occasional surveys, and monitor potential threats. These activities will help prevent the possibility of Endangered Species Act listing of this species.

### **Economic Impacts of Sensitive Species Designation.**

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. An ESA listing of Utah physa would impact management and development of water resources and the management of military effluent in northeastern Box Elder and southwestern Tooele counties. There would also be increased costs of regulatory compliance for many land-use decisions and mitigation costs.

### **Literature Cited.**

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Oliver, G.V. and W.R. Bosworth. 1999. Rare, imperiled, and recently extinct or extirpated mollusks of Utah: a literature review. Report to the Utah Division of Wildlife Resources, Publication Number 99- 29. Salt Lake City, Utah, USA.

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