



**State of Utah**  
**DEPARTMENT OF NATURAL RESOURCES**  
*Division of Wildlife Resources – Native Aquatic Species*

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# **Native Aquatics Species Surveys of the Ibapah Valley**

**Central Region  
2005**

Utah Division of Wildlife Resources  
1594 W. North Temple  
Salt Lake City, Utah

## **Least Chub Surveys**

Surveys for extant populations of least chub were conducted on the Goshute Indian Reservation in Ibapah Valley. Surveys involved setting minnow traps at sites with suitable least chub habitat. Two ponds and areas along East and Middle Deep Creeks were surveyed for least chub. The surveyed areas along East and Middle Deep Creek were chosen based on the presence of slow and deep water thought to be suitable for least chub. Traps were set for 18 to 24 hours at a minimum depth of 12 centimeters. Trap location, trap depth, and total trapping time were recorded for each trap.

Sites surveyed on the Goshute Indian Reservation within the Ibapah Valley included Nelms pond, 15-mile pond (Figure 1), and areas along East and Middle Deep Creeks (Figure 2). No fish were captured during these surveys.

While no least chub were found during surveys conducted in the Ibapah Valley, suitable least chub habitat was located along East and Middle Deep Creeks. Surveys of these streams in the past found rainbow trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarkii*), mountain sucker (*Catostomus platyrhynchus*), and speckled dace (*Rhinichthys osculus*) to be the abundant fish species (UDWR unpublished data). Consulting with long time residents and past biologists has raised some doubt that least chub ever occupied the Ibapah Valley.

## **Spotted Frog Surveys**

The Ibapah Valley contains a large population of spotted frogs found throughout the valley. Two monitoring sites were established in 1997 to represent different habitat types in the valley. The south monitoring site is typified by natural spring sources while the north monitoring site is pastureland that is artificially flooded. Both have reflected changes in the spotted frog population over the past eight years. In order to better understand the distribution of spotted frogs in the Ibapah Valley a sweep survey was conducted throughout the valley during 2005.

Sweep surveys were conducted by traversing the perimeter of ponds and other wetlands while looking for amphibians and egg masses. In ponds with extensive aquatic

vegetation, care was taken while walking through the vegetation to avoid harming egg masses and/or frogs. In bogs and willow thickets, researchers spread out and make broad zig-zags through the site to ensure proper coverage of the area. If frogs, tadpoles, or egg masses were observed, their locations were recorded using a handheld GPS unit. Sweep surveys are generally conducted in areas surrounding or connected to currently occupied sites, as well as areas that were historically occupied by the spotted frog.

The sweep survey of the Ibapah Valley occurred during April 2005 (Figures 3, 4, and 5). A total of 39 egg mass deposition sites were located, which contained a total of 422 egg masses (Figures 3 and 4).

During the sweep survey, a healthy population of spotted frog was located approximately two kilometers north of the north monitoring site (Figure 3). Spotted frog habitat in this location is adjacent to and receives perennial flow from Deep Creek. This site would likely provide a more accurate indicator of the health of the spotted frog population in the northern portion of the Ibapah Valley than that provided by the current north monitoring site. Efforts will be made in 2006 to establish this new location as a monitoring site.

## **Recommendations**

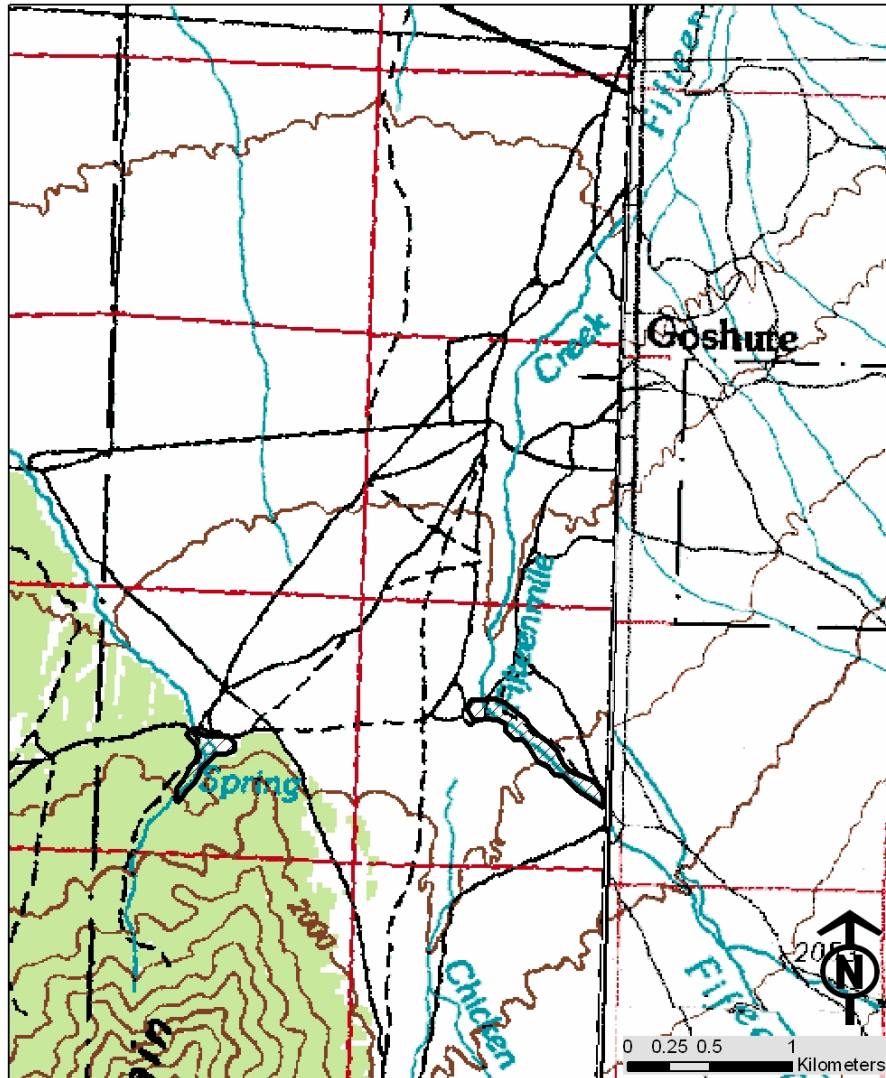
Native aquatic species surveys conducted in the Ibapah Valley provided valuable information regarding the status of spotted frog and least chub in the area. Robust spotted frog populations in both the north and south areas of the valley provide a source for repopulation of adjacent areas. The lack of evidence of least chub ever occupying the valley provides direction for future management activities.

Several areas of potential spotted frog habitat exist in the Ibapah Valley, however many of these areas are severely impacted by poor grazing strategies or water development. Activities to enhance habitat for spotted frog would provide areas for the current population to expand and increase the distribution of spotted frog in the Ibapah Valley. Modifying existing grazing strategies to reduce impacts during the early spring would help increase tadpole survival and recruitment. Fencing to keep cattle from critical spotted frog areas would also help improve habitat quality. The establishment of

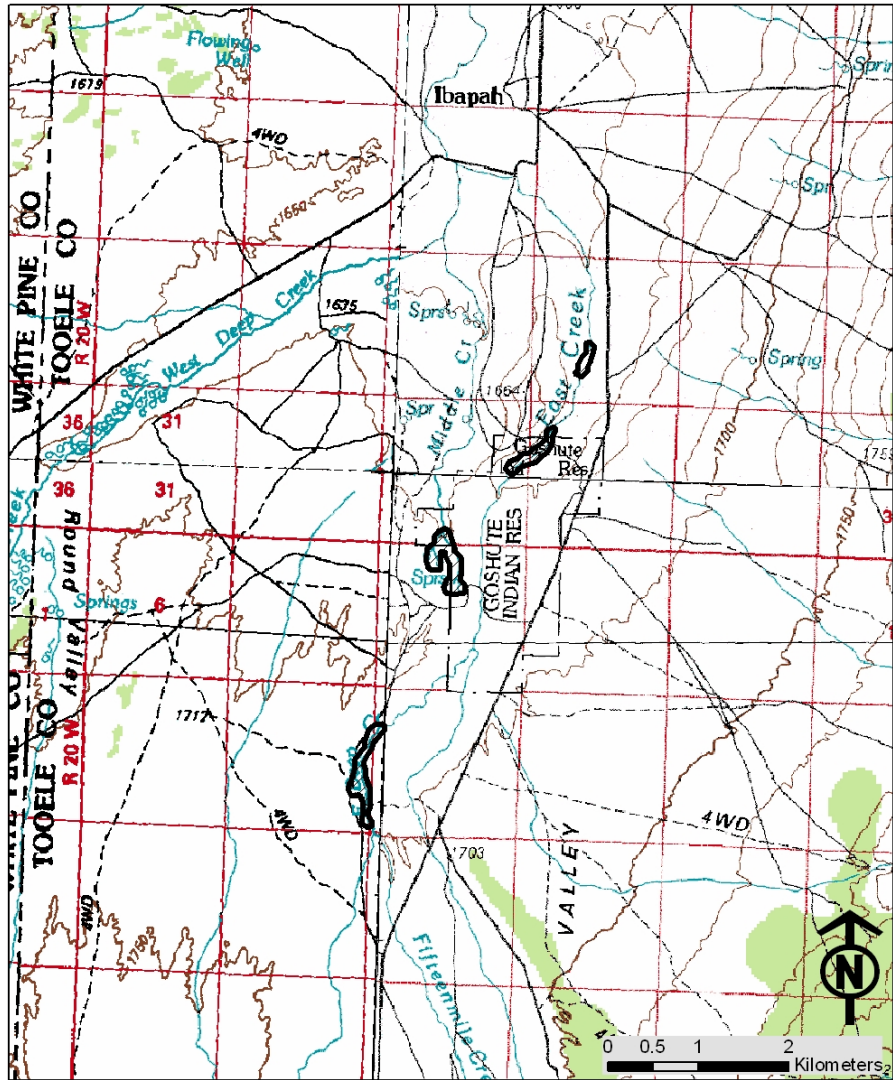
conservation easements with local landowners would be particularly helpful in protecting habitat and implementing the needed changes.

The Least Chub Conservation Team has discussed the possibility of establishing a population of least chub in the Ibapah Valley. With no evidence of least chub ever occupying the area we recommend that efforts to establish a population be abandoned. The valley supports healthy populations of spotted frog, Bonneville cutthroat trout (*Oncorhynchus clarkii utah*), speckled dace, and mountain sucker. Other locations should be considered for least chub range expansion to prevent any disturbance to the current ecological balance in the valley.

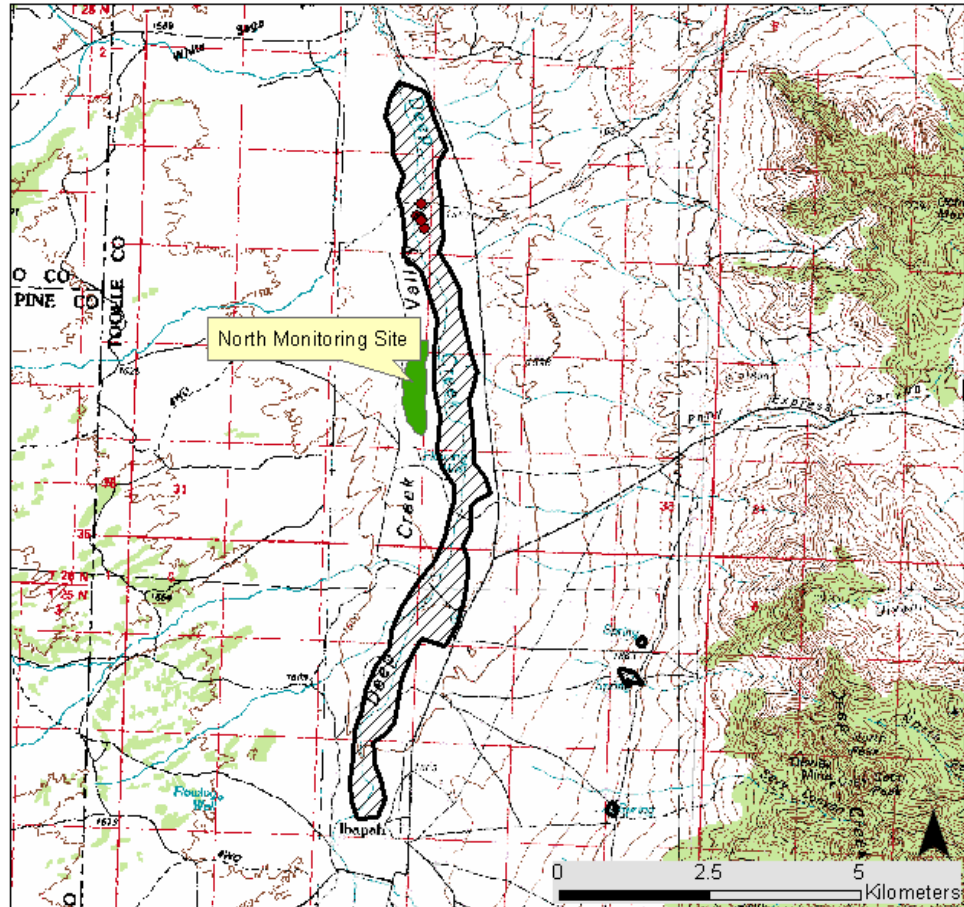
**Figure 1.** Ponds surveyed for least chub. Pond locations are depicted on the Fish Springs and Kern Mountains 1:100,000 scale topographic maps. Locations of ponds are indicated by crosshatched areas.



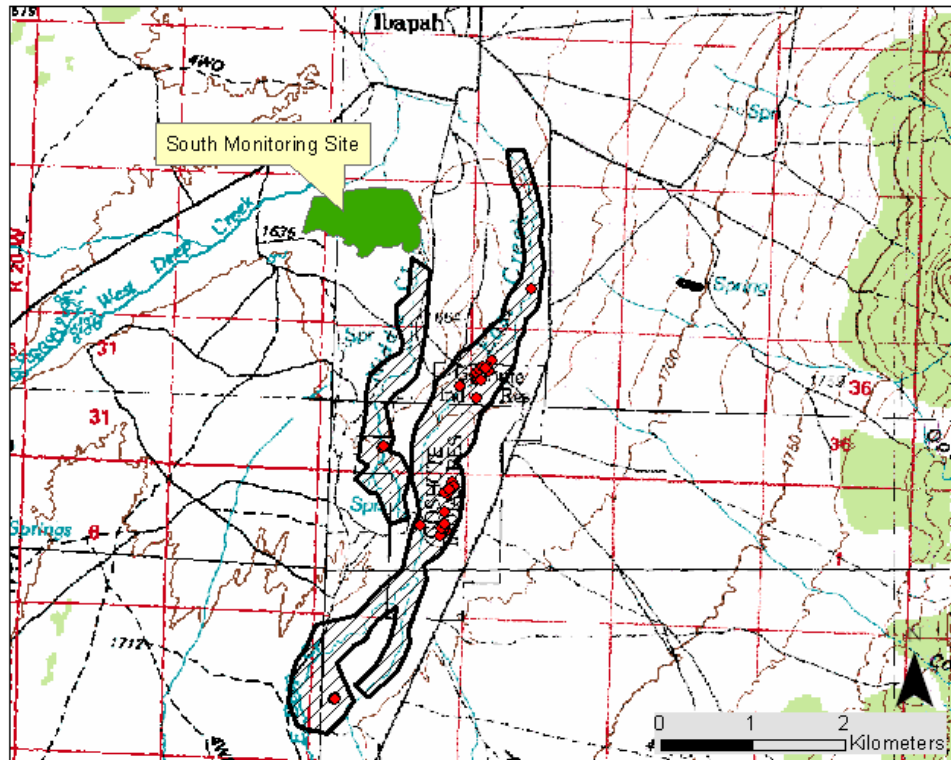
**Figure 2.** Stream sites surveyed for least chub. Survey locations are depicted on the Wildcat Mountain, Currie, Fish Springs, and Kern Mountains 1:100,000 scale topographic maps. Locations of surveys are indicated by crosshatched areas.



**Figure 3.** Spotted frog sweep survey locations in the Ibapah Valley subunit depicted on the Wildcat Mountain 1:100,000 scale topographic map. Locations of surveys are indicated by crosshatched areas, while egg mass deposition sites are indicated with red circles.



**Figure 4.** Spotted frog sweep survey locations in the Ibapah Valley subunit depicted on the Wildcat Mountain, Kern Mountains, and Fish Springs 1:100,000 scale topographic maps. Locations of surveys are indicated by crosshatched areas, while egg mass deposition sites are indicated with red circles.



**Figure 5.** Spotted frog sweep survey locations in the Ibapah Valley subunit depicted on the Weaver Canyon 7.5 minute quadrangle map. Locations of surveys are indicated by crosshatched areas.

