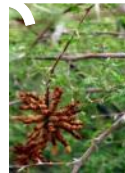


Large and Small Mammal Surveys along the Las Vegas Wash

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Jason R. Eckberg & Marissa E. Foster
Las Vegas Wash Coordination Committee
Southern Nevada Water Authority



Las Vegas Wash

- The Las Vegas Wash (Wash) is a formerly ephemeral, now perennial, stream that carries treated wastewater, storm flows, groundwater and urban run-off to Lake Mead from the Las Vegas Valley
- Flows from the Las Vegas Wash makes up about 2% of the water flowing into Lake Mead
- Erosion along the Wash's banks caused significant reduction in wetland and riparian habitats from over 2000 acres in the 1950s to less than 200 acres in the 1990s



Las Vegas Wash Coordination Committee History

- **The Las Vegas Wash Coordination Committee (LVWCC) was established in 1998**
 - **Consists of 30 stakeholders**
- **In 2000 the committee finalized the Las Vegas Wash Comprehensive Adaptive Management Plan (CAMP)**
 - **Includes a long-term fish and wildlife management plan**
- **The Wildlife Management Plan (WMP) was finalized by the committee in 2008**
 - **Includes the recommendation to conduct baseline wildlife surveys and to continue regular monitoring**



Clark County Wetlands Park



Las Vegas Wash Mammal History

- **Baseline surveys for both large and small mammals were conducted by Bradley and Niles in 1972 (Bradley and Niles 1973)**
- **Small mammals were studied again by students at UNLV in 2002 – primarily upland areas**
- **Large mammal activity was surveyed through observation, tracks and sign**
- **Small mammals were surveyed using snap traps**

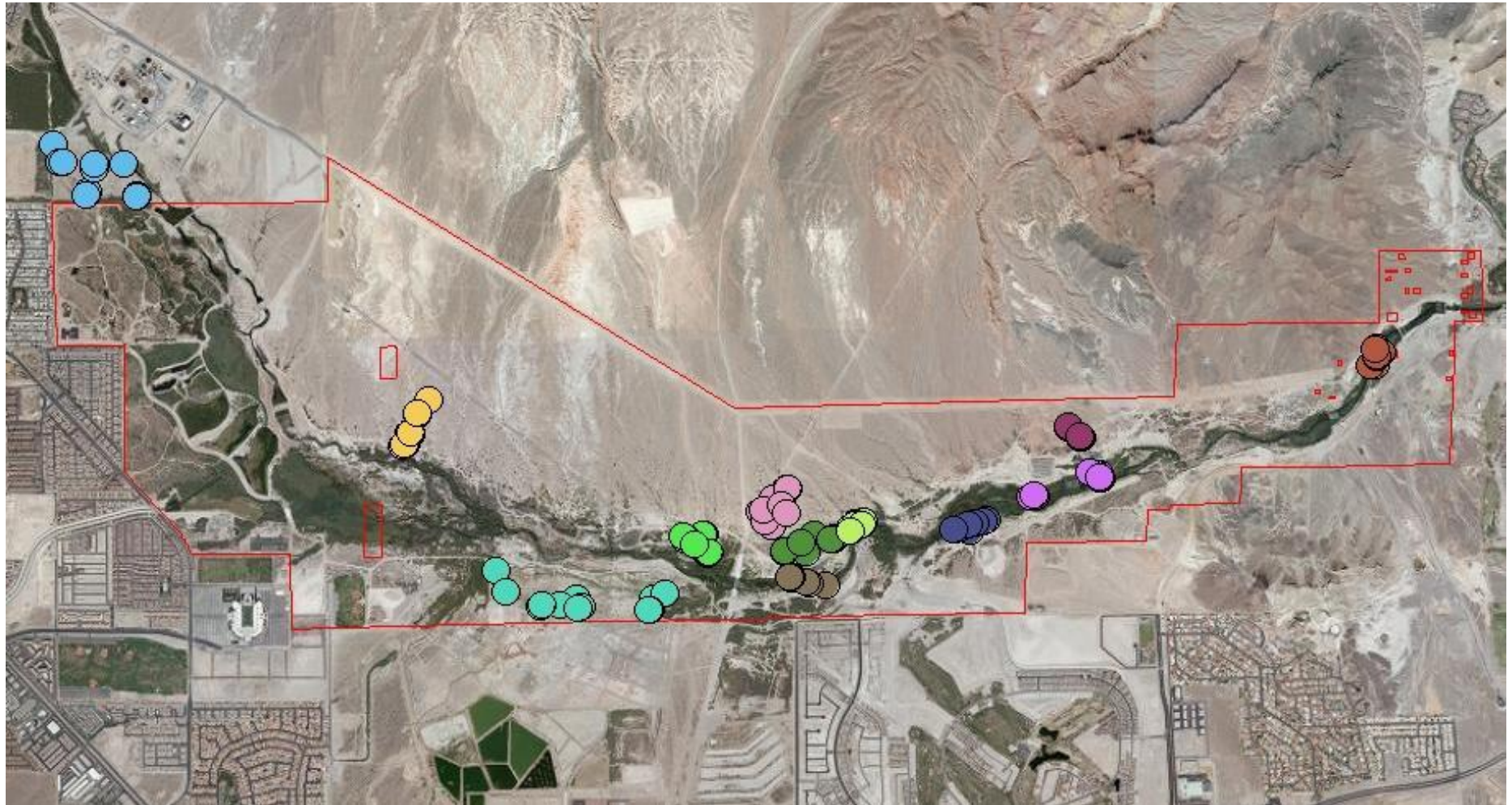


Large Mammal Survey

- 12 sites are being surveyed beginning November 2009
 - 6 riparian, 6 upland
- Three camera traps were set up in the same site for a maximum of one week
 - Repeated each season
- Camera locations were baited with food, scent or combination of both
- Specific locations within sites were based on observation of sign (scat, tracks, etc.)
- Locations were also selected to avoid human disturbance
- Cameras took both jpg photos and video



Large Mammal Capture Locations



Large Mammals

- **Eight large mammals have been identified**

- **Striped skunk and spotted skunk seen for the first time since the 1970's**

- **First photos of beaver and ring-tailed cat along the Wash**

- **Coyote, cottontails, jackrabbits, and raccoon also captured**

- **Non-target species also captured**

- **Ground squirrels, lizards, bats, birds, insects, pets, biologists, park visitors**



Small Mammal Survey

- Study began in August 2009, concluded in November 2010
- 8 study sites, all riparian habitats
- 4 transects per site, two parallel and two diagonal
- Used Sherman live traps (7.5 x 9 x 23 cm) baited with seed mixture mixed with peanut butter
- Collection data recorded using Trimble GPS unit



Collections at Rainbow Gardens Weir



Small_Mammal_Captures			
● AMM LEU	● CHA sp	● NEO LEP	● PER sp.
● CHA FOR	● CHA sp.	● PER BOY	● RAT sp.
● CHA PEN	● DIP MER	● PER ERM	● REI MEG
	● MUS MUS	● PER MAN	● Unknown

Small Mammal Survey

- A total of 587 collections made (109 recaptures)
- 11 species captured
 - *Western harvest mouse (*Reithrodontomys megalotis*) – 38 collected (5 recaptures)
 - #Cactus mouse (*Peromyscus eremicus*) – 405 collections (92 recaptures)
 - †Desert pocket mouse (*Chaetodipus penicillatus*) – 37 collected (3 recaptures, 10 reproductive females)
 - House mouse (*Mus musculus*)
 - Desert woodrat (*Neotoma lepida*)
 - White-tailed antelope ground squirrel (*Ammospermophilus leucurus*)
 - Brush mouse (*Peromyscus boylii*)
 - Long-tailed pocket mouse (*Chaetodipus formosus*)
 - Deer mouse (*Peromyscus maniculatus*)
 - Merriam's kangaroo rat (*Dipodomys merriami*)
 - *Rattus* spp.



QUESTIONS?



Jason R. Eckberg

702 – 822 – 3389

jason.eckberg@snwa.com

