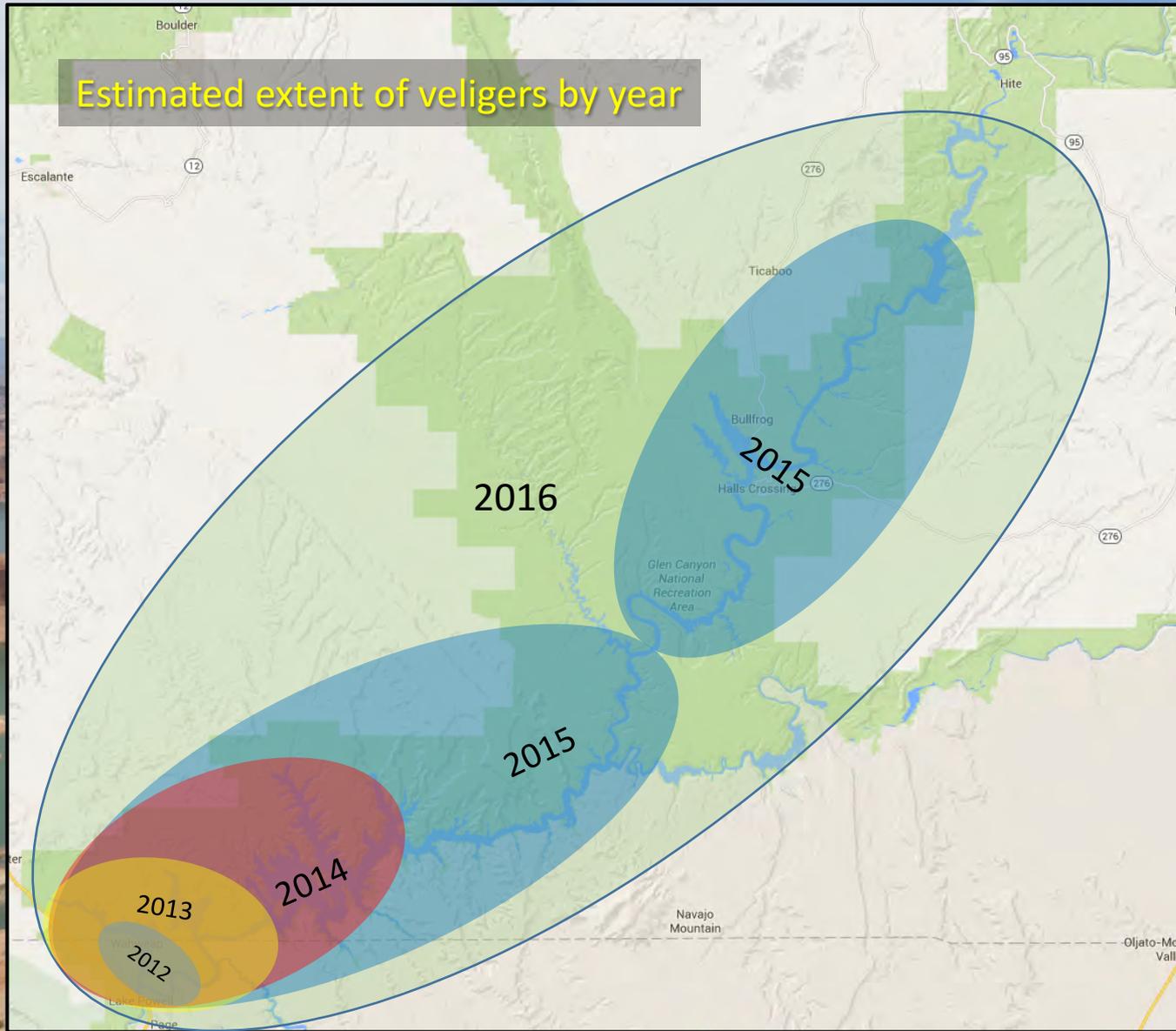




QUAGGA MUSSEL MANAGEMENT AT GLEN CANYON







GLCA Containment Program

NPS Quagga/Zebra Mussel Infestation Prevention and Response Planning Guide

Initial to Extended to Long-term Response



Objective 1: Determine extent of infestation

Objective 2: Contain infestation through management

Objective 3: Investigate treatment options

Objective 4: Long-term management responsibility



Administrative/Agency Controls

CUA's, SUP's, Researchers, Contracts, Agreements, etc.

- Prevent new AIS in Lake Powell – Clean, Drain, Dry
- Contain Mussels in Lake Powell
- NPS attendance at all SUP pre-meetings
- Inform clients, seek assistance
- Vessel reporting
- HACCP

Concessioner-Contract limitations

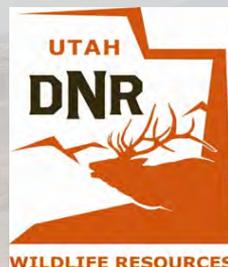
- Letters to slip/moored customers
 - ✓ Notification of infestation and state law requirements
 - ✓ Signed acknowledgement of owner responsibility
 - ✓ Toxic anti-fouling paint, scraping, slip liners, boat lifts...
- Advertisement in brochures
- Posters in marina facilities
- Attendance at Watercraft inspection and Decontamination Training



Agency Cooperation and Partnerships

MOU-Utah/NPS

- Joint participation, effective communication, and collaboration to prevent AIS to or from Glen Canyon
- Existing decon stations use
 - ✓ NPS oversight and support
 - ✓ Flow Chart
- Designated “Clean, Drain, Dry” areas
 - ✓ Inspection, screening, tagging
- Cooperative effort
- Best use of relative strengths and resources





Agency Cooperation and Partnerships

Boat inspections:

- Multiple locations lake wide
- Utah checkpoints & receiving waters

Boater education:

- 4 WIT/WID Level II for Commercial Use Authorization's, Agencies & Concessions staff
- 16 SUP Meetings

Boat decontamination:

- NPS & Utah coordination
- Local private business both uplake & downlake !!!!





NPS Outreach & Education

Boater audiences:

- Come & go
- Slipped & moored

Focused AIS messages:

- “Clean, Drain, Dry”, “Pull the Plug”, “Don’t Move a Mussel”

Park messages:

- “Know Before You Go”
- “Powell Watch”
- “Love Your Lake”
- “Find Your Park”

Targeted medium:

- Informal & formal programs





2016 AIS Program Highlights

➤ 113 Informal table programs:

- ✓ Marinas, campground store

➤ 3 Special Events:

- ✓ Marina Days, Centennial B-DAY hosted by ARAMARK, Balloon Regatta

➤ 16 Special Use Permit meetings:

- ✓ Fishing Tournaments, Poker Runs

➤ 6 Media attendances

➤ Horseshoe Bend heat safety support week

➤ 57,738 Information, orientation and interpretation

➤ 79,761 vessels = 121,066 "Clean Drain Dry"

❖ **178,804 Total visitor contacts**





Interagency Meeting Goals

Utah & Arizona WAFWA members with GLCA, IMR, WASO NPS

1. 100% decontamination compliance of long-term slipped/moored boats with mandatory dry time and 100% vessel tracking
2. Strategic, coordinated outreach for boaters/groups/audiences of Lake Powell regarding AIS seeking 100% exposure
3. Consistent boater requirements for AIS across jurisdictions
4. Uniform approach to vessel tracking (logging and sharing info regarding boat movement) across the West (ANS Utility APP)
5. All day-use vessels will be drained including pulling plug when leaving infested waters in Glen Canyon NRA
6. AIS Programs are sustainable, consistent, efficient, professional and provide for safe work conditions and good customer service
7. Lake Powell AIS program is seen as a model for success in the West

