

Lower Colorado River



Multi-Species Conservation Program

Marsh Bird Surveys at
MSCP Conservation Areas and
Topock Gorge, 2017-2019

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- In 2017 thru 2019, surveys for marsh birds were conducted at Lower Colorado River Multi-Species Conservation Program conservation areas along portions of the Lower Colorado River.
- Surveys were conducted using a standardized call-playback protocol from the National Marsh Bird Monitoring Program (Conway 2009) for the Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), California black rail (*Laterallus jamaicensis coturniculus*), western least bittern (*Ixobrychus exilis hesperis*) and Virginia rail (*R. lemicola*)
- Surveys at Conservation Areas were conducted primarily from mid March to May.
- Surveys in Topock Gorge were conducted in March, April and May.
- Presence surveys are conducted at Conservation Areas where marsh habitat has been created or construction activities are planned.
- Surveys in Topock Gorge are part of an interagency systemwide monitoring program.

Conservation Areas and Topock Gorge

Big Bend Conservation Area

Beal Lake Conservation Area

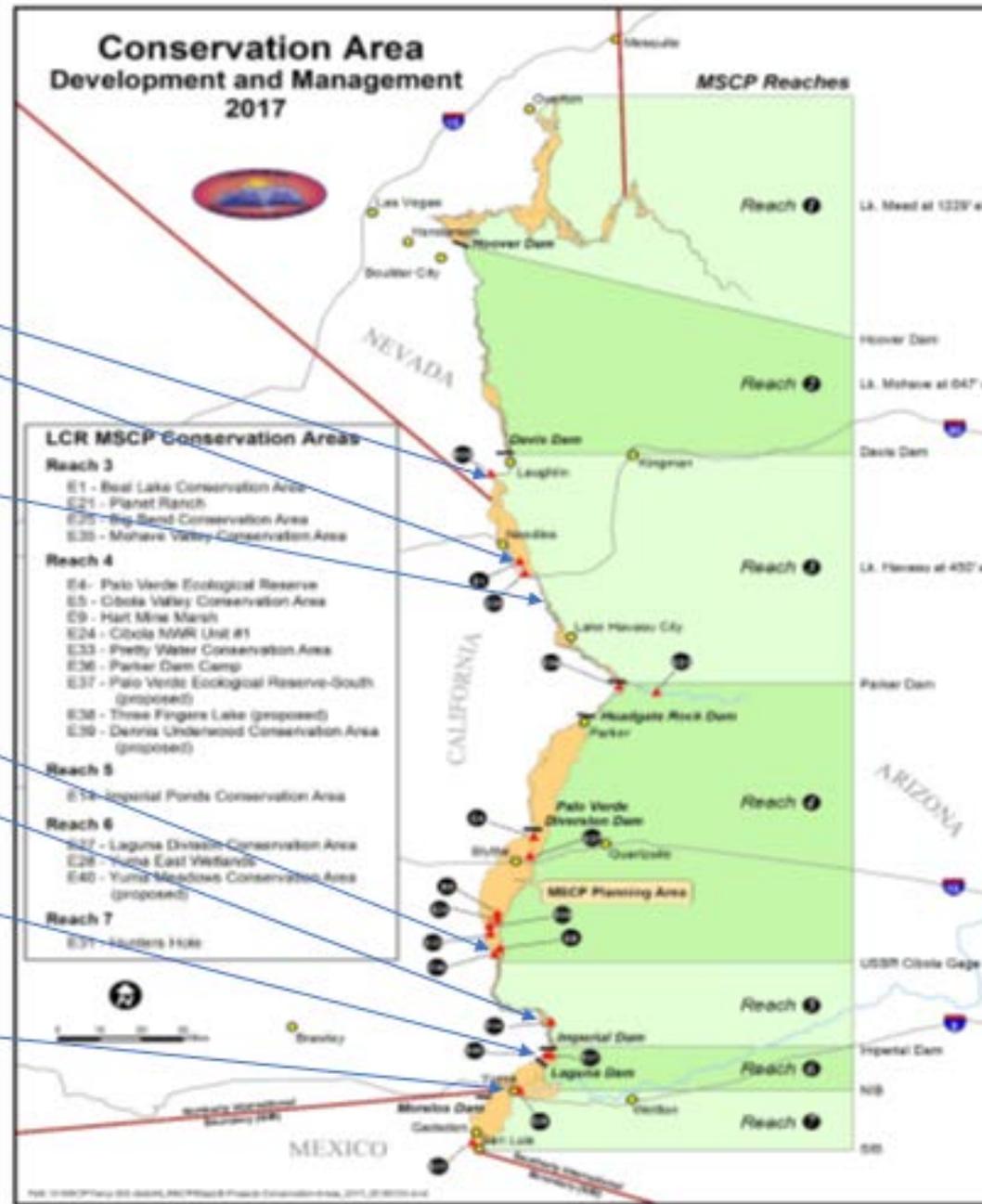
Topock Gorge

Hart Mine Marsh

Imperial Ponds Conservation Area

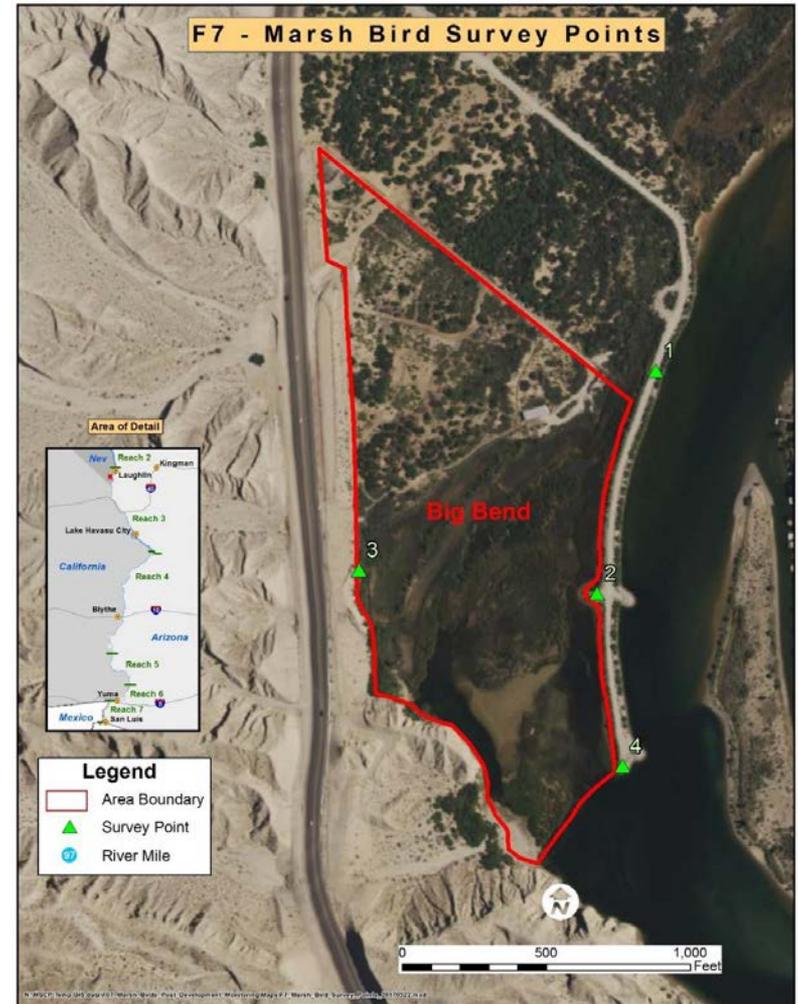
Laguna Division Conservation Area

Yuma East Wetlands



Big Bend Conservation Area

- South of Laughlin, Nevada
- It is at the northern limit of Reach 3 and between River Miles 266 and 267.
- A small marsh backwater that contains approximately 15 acres of backwater and 15 acres of upland. There are four survey points.
- The predominant vegetation of the backwater is southern cattail (*Typha domingensis*).
- Surveys were conducted by the Bureau of Reclamation (Reclamation) and Southern Nevada Water Authority (2019).

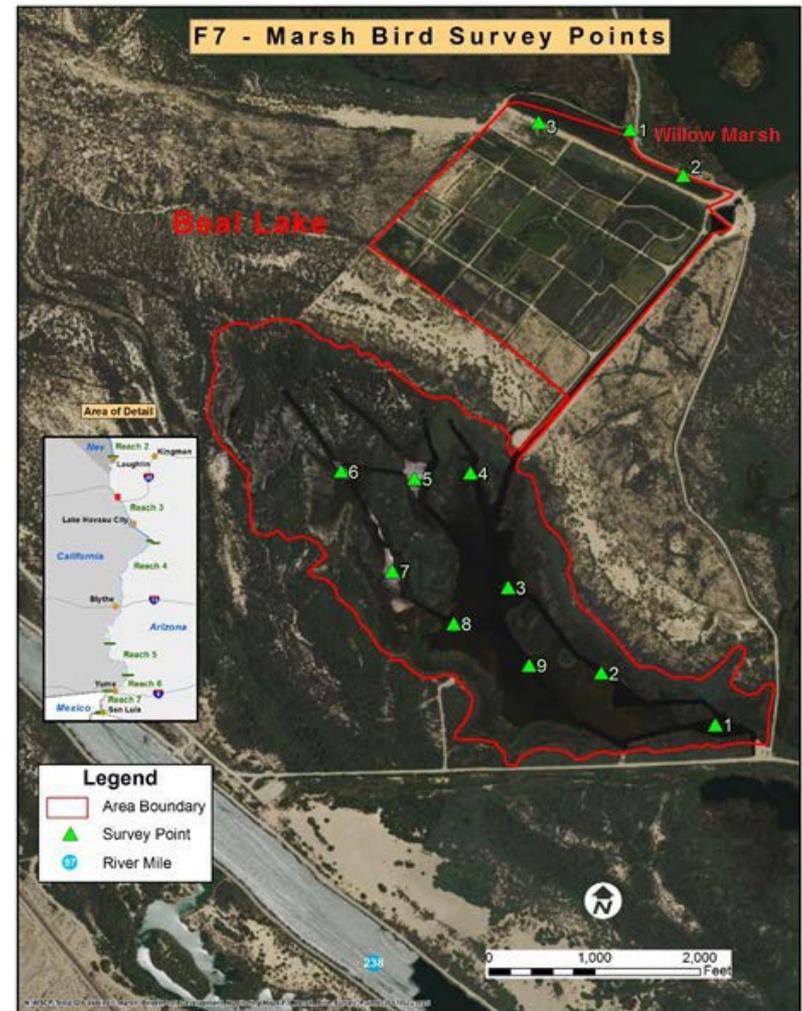


Big Bend Conservation Area

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/29/2017	0	0	0	0	2	1	0
4/6/2017	0	0	0	0	4	1	0
4/18/2017	0	0	0	0	2	1	0
3/15/2018	0	0	1	1	1	0	0
4/6/2018	0	0	0	0	1	3	1
4/19/2018	0	0	0	0	2	1	2
3/15/2019	No Survey						
4/8/2019	0	0	0	1	9	2	9
5/9/2019	0	2	0	0	0	2	2

Beal Lake Conservation Area

- In Reach 3 between River Miles 238 and 239 on the Havasu National Wildlife Refuge between Topock Marsh and the Colorado River.
- There are nine survey points at Beal Lake, three at Willow Marsh
- Beal Lake is roughly 80 acres of emergent vegetation and Willow Marsh 14 acres. Predominantly southern cattail and bulrush (*Schoenoplectus* spp.).
- Surveys were conducted by Reclamation.

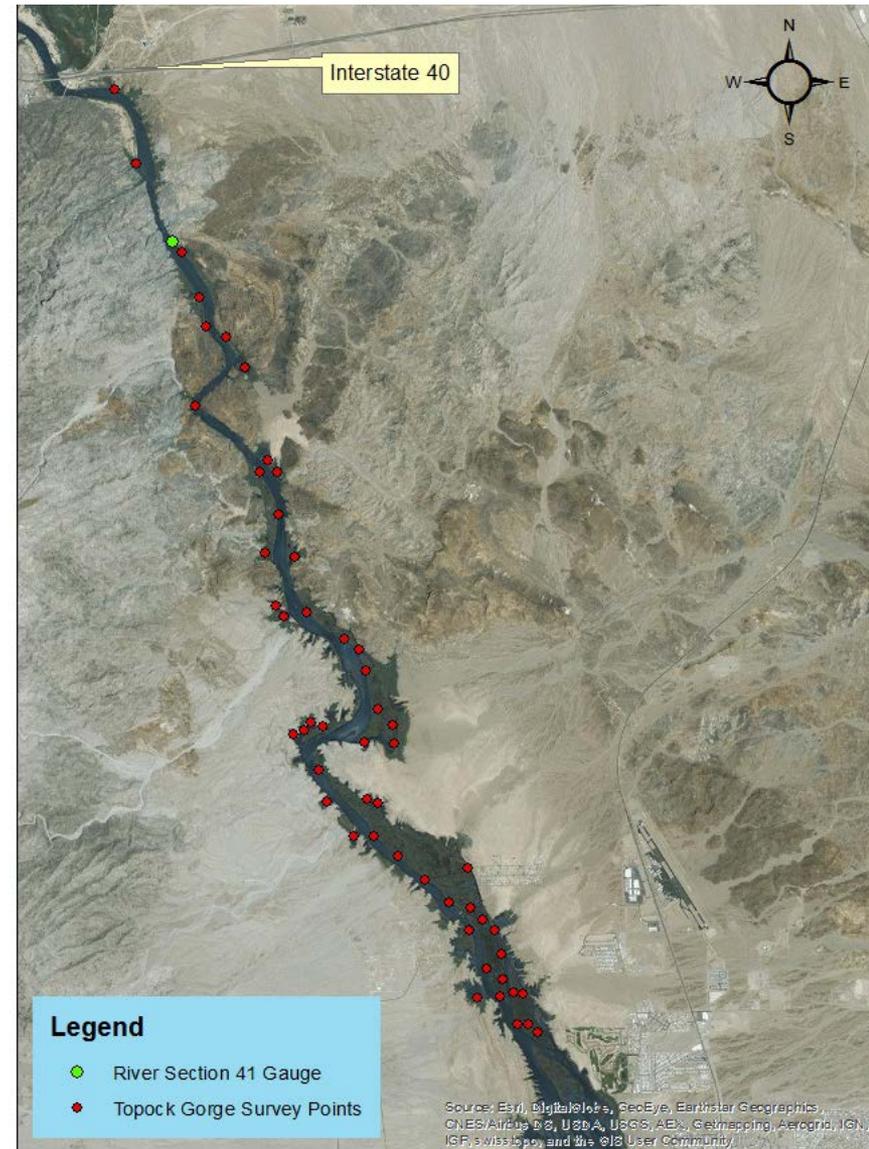


Beal Lake Conservation Area

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/15/2017	No Survey						
4/6/2017	2 (2)	7	0	1	2	5	1 (1)
4/28/2017	2 (1)	7	0	1 (1)	0	4	5 (2)
3/16/2018	0	2	0	4 (1)	9 (1)	1	2 (4)
4/6/2018	3	4	0	4 (2)	7 (3)	3	7 (2)
4/19/2018	9	12	0	1 (4)	2	9	6
3/26/2019	11	0	0	5	3	0	2
4/11/2019	11	5	0	1	2	13	4
4/24/2019	13	11	0	0	0	6	4

Topock Gorge

- On the lower Colorado River between Needles, California, and Lake Havasu City, Arizona, in the Havasu National Wildlife Refuge. It is located in Reach 3.
- The survey route in Topock Gorge runs from River Mile 233 to just past River Mile 218, a distance of 15.3 miles (24.6 kilometers).
- Marshes are located on both the California and Arizona sides of the river, with the largest marsh complexes on the Arizona side just north and south of Blankenship Bend (River Mile 222.5). The predominant vegetation consists of California bulrush (*Schoenoplectus californicus*), narrowleaf cattail (*Typha augustifolia*), and common reed (*Phragmites communis*) interspersed with stands of saltcedar (*Tamarix* spp.) and coyote willow (*Salix exigua*).
- There are 52 survey points in Topock Gorge.
- Surveys were conducted by Reclamation.

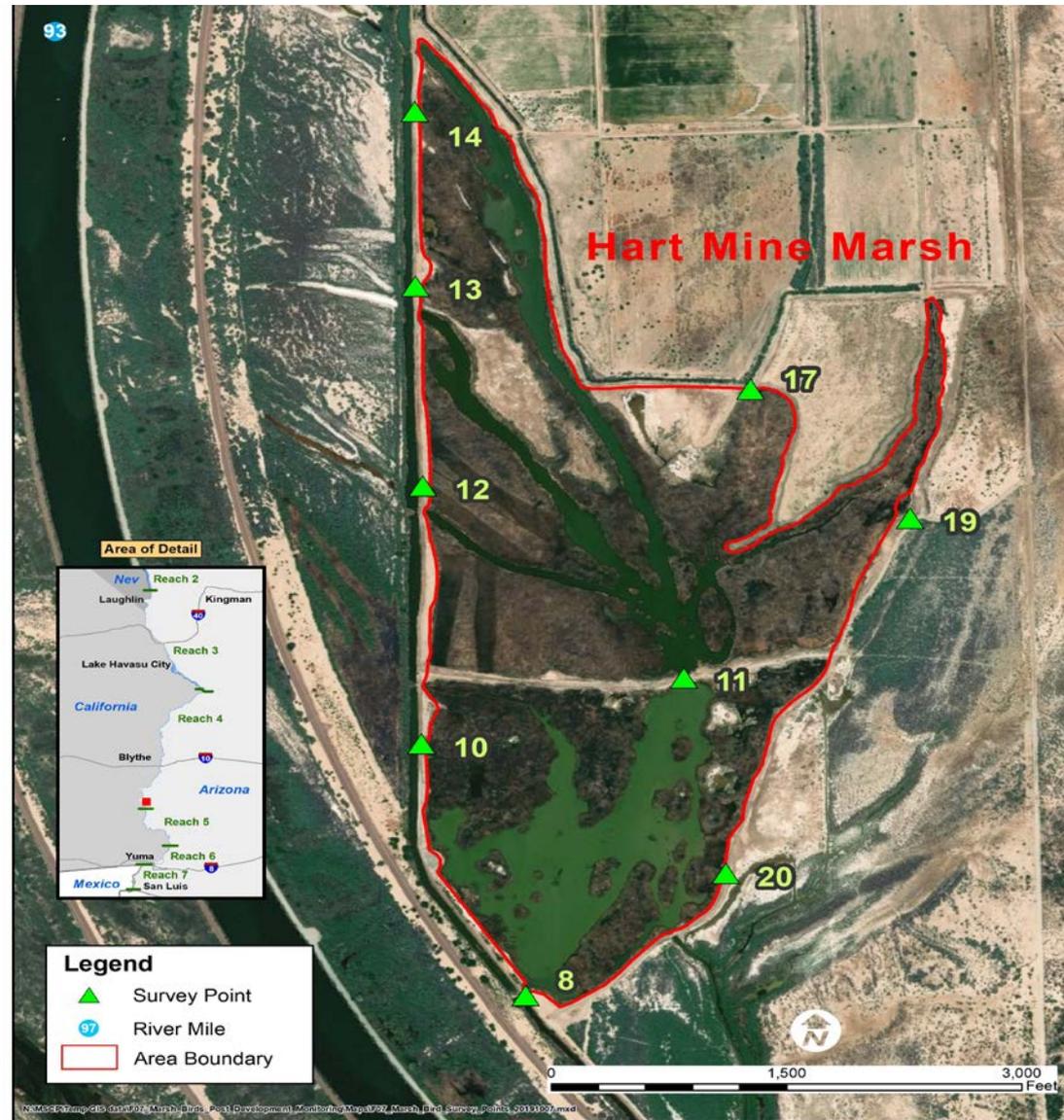


Topock Gorge

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/20/2017 - 3/24/2017	55	21	1	10	8	61	6
4/11/2017 - 4/14/2017	81	28	0	10	11	66	10
5/9/2017 - 5/12/2017	76	54	0	0	0	43	7
3/19/2018 - 3/23/2018	19	4	3	10	7	17	4
4/24/2018 - 4/27/2018	52	38	0	4	2	70	18
5/8/2018 - 5/11/2018	54	43	1	0	0	48	14
3/18/2019 - 3/22/2019	63	14	1	20	4	36	2
4/16/2019 - 4/19/2019	51	25	0	11	8	58	6
5/7/2019 - 5/10/2019	47	44	2	0	0	42	11

Hart Mine Marsh

- On the Cibola National Wildlife Refuge at the southern limit of Reach 4, adjacent to River Miles 91 and 93.
- It contains 163 acres of marsh, restored between 2009 and 2011
- The vegetation consists of southern cattail, three-square bulrush (*Scirpus olneyi*), California bulrush (*Schoenoplectus californicus*), common spikeush (*Eleocharis palustris*), great bulrush (*S. tabernaemontani*), inland saltgrass (*Distichlis spicata*) with quailbush (*Atriplex lentiformis*), and honey mesquite (*Prosopis glandulosa*).
- There are 9 survey points.
- Surveys were conducted by the USFWS.

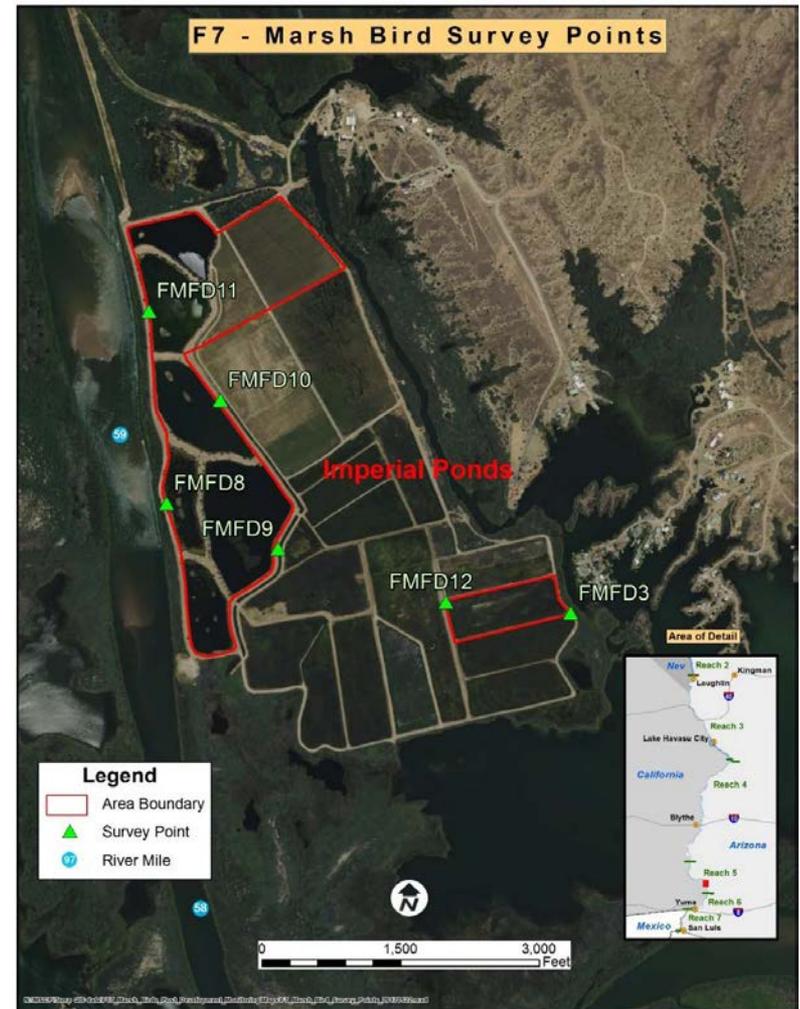


Hart Mine Marsh

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/23/2017	8	3	0	0	4	5	2
4/7/2017	6	14	0	5	5	12	3
4/22/2017	10	8	0	5	0	9	10
3/25/2018	5	4	0	3	9	10	7
4/10/2018	18	11	0	3	2	8	6
4/26/2018	25	13	0	3	5	15	10
3/21/2019	6	4	0	1	2	1	8
4/3/2019	7	7	0	4	4	8	4
4/19/2019	20	7	0	0	0	7	3

Imperial Ponds Conservation Area

- Located on the Imperial National Wildlife Refuge in Reach 5 adjacent to River Miles 59 and 58.
- There are six constructed ponds with 80 acres of backwater habitat that contain some marsh habitat along the edges and in hummocks within the ponds.
- Field 18 is a 12-acre marsh converted from a farm field.
- It is dominated by bulrush and was constructed primarily for California black rails.
- There are four survey points for the ponds (8–11) and two for Field 18 (3 and 12).
- Surveys were conducted by the USFWS.



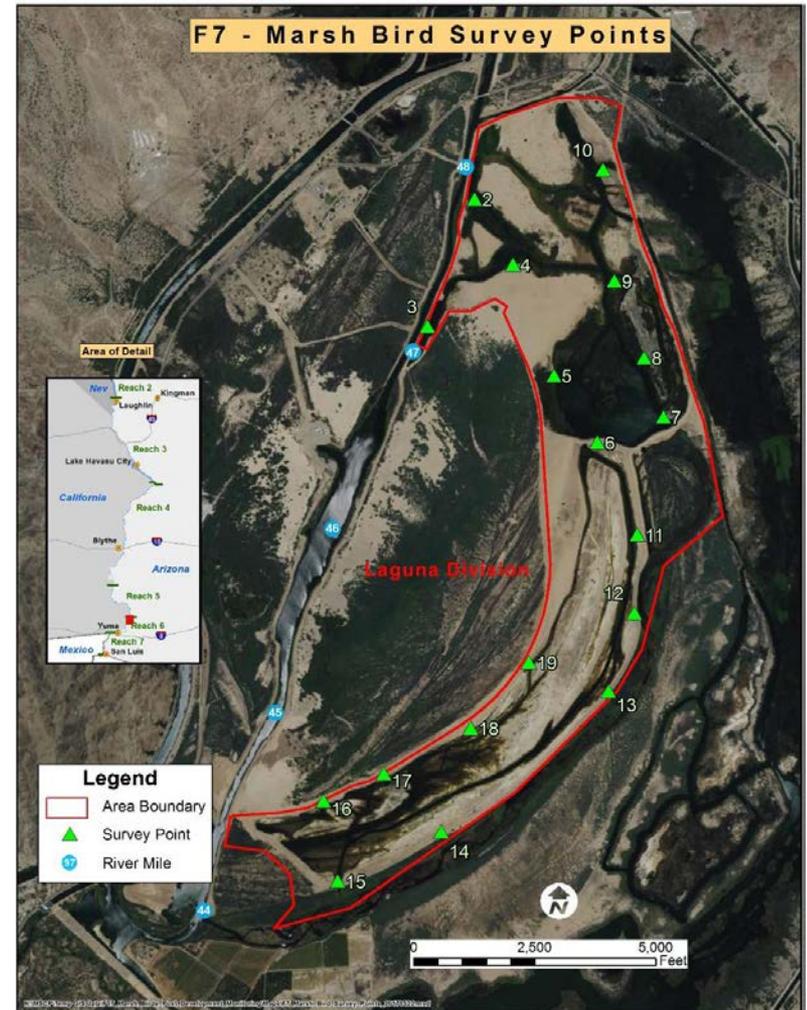
Imperial Ponds Conservation Area

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/17/2017	0	0	0	0	1	3	0
4/7/2017	2	0	1	1	4	5	0
4/21/2017	2	1	0	0	0	3	1
3/23/2018	0	1	0	0	0	6	1
4/6/2018	0	1	0	0	1	13	2
4/25/2018	0	0	0	0	0	6	0
3/17/2019*	1	0	0	0	0	14	4
4/11/2019	6	2	1	0	0	12	4
5/4/2019	6	1	1	0	0	10	4

* Surveys were not conducted in Field 18 due to canal repairs

Laguna Division Conservation Area

- 1,100 acres nestled between Imperial Dam and Laguna Dam, with the Mitty Wildlife Area to the east and the Laguna Settling Basin to the west.
- It contains approximately 200 acres of open water and marsh. Marsh species were planted in Cell 1 in 2013 and Cell 2 in 2014.
- Marsh vegetation includes three-square bulrush, California bulrush, chairmaker's bulrush (*Schoenoplectus americanus*), alkali sacaton (*Sporobolus airoides*), inland saltgrass, and yerba mansa (*Anemopsis californica*).
- There are 18 survey points.
- Surveys were conducted by Reclamation and a volunteer for AGFD from Pheasants Unlimited (2019)



Laguna Division Conservation Area

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/22/2017	1	1	0	2	2	6	3
4/20/2017	3	4	0	3	1	5	9
5/10/2017	3	6	0	4	0	10	0
3/2/2018	2	2	0	2	3	12	2
4/11/2018	4	2	0	1	5	4	8
4/26/2018	1	3	0	0	2	11	2
3/15/2019	No Survey						
4/2/2019 - 4/4/2019	6	3	0	9	8	18	21
4/25/2019 - 4/26/2019	14	9	0	7	8	21	19

Yuma East Wetlands

- Located in Yuma, Arizona in Reach 6 at River Mile 31.
- It includes two marshes totaling 66 acres, one north of the Colorado River and one south of the river.
- Marsh vegetation planted includes bulrush, alkali sacaton, and inland saltgrass.
- There are 9 survey points.
- Surveys were conducted by Reclamation.



Yuma East Wetlands

	<u>RIRA</u>	<u>LEBI</u>	<u>BLRA</u>	<u>VIRA</u>	<u>SORA</u>	<u>PBGR</u>	<u>COGA</u>
3/21/2017	2	0	0	0	0	1	2
21-Apr-17	5	0	0	0	1	0	0
26-May-17	3	2	0	0	0	0	1
3/29/2018	2	0	0	0	0	0	0
10-Apr-18	5	2	0	4	3	0	2
25-Apr-18	5	1	0	1	0	0	0
3/22/2019	6	0	0	0	1	1	2
5-Apr-19	1	0	0	0	1	0	0
18-Apr-19	4	1	0	0	0	1	0

What's in the future?

- Surveys will be conducted by Reclamation at Topock Gorge and Yuma East Wetlands.
- USFWS will continue to conduct surveys at Hart Mine Marsh and Imperial Ponds Conservation Area.
- Surveys will no longer be conducted by Reclamation at:
 - Big Bend Conservation Area (This is a backwater managed for native fish).
 - Beal Lake Conservation Area (This is a backwater managed for native fish).
 - Laguna Division Conservation Area (Site was developed for terrestrial riparian bird species).

Questions?

