

PROJECT IBiS: INVENTORYING BIRDS IN THE SILVIES FLOODPLAIN

Audubon Society of Portland

BACKGROUND

It is well-known that flood-irrigated ranchlands in the Silvies River Floodplain in Harney County, near Malheur National Wildlife Refuge, support large numbers of bird species, most notably waterfowl and other waterbirds during the spring and fall migration periods. However, there has not been a concerted effort to track species diversity, abundance, and seasonal patterns of bird usage on these private lands. There are existing eBird hotspots where birders report bird species checklists for some of these sites that border public roads, but this information has not been collected in a standardized way nor are we aware that it has been compiled and reported to summarize multiple ranchland sites in the region.

With the 2016 award of OWEB funds to the Harney Basin Wetland Initiative, conservationists are working with ranchers on replacing aging flood-irrigation structures with newer structures that are expected to increase waterfowl habitat. This project would help provide baseline information on bird communities that utilize flood-irrigated ranchlands in Harney County as well as provide information on how new infrastructure at some properties is influencing bird use of these areas.

PROJECT GOALS

- (1) **Science and Management**: This project will quantify bird communities (species diversity and abundance) during spring and fall migration and during the breeding season at a select number of private ranchland properties in Harney County including some properties that have had flood-irrigation infrastructure replaced or will in the near future. This will provide baseline information on bird communities that use flood-irrigated private ranchland sites and potentially help understand how new infrastructure is increasing bird habitat.
- (2) **Outreach and Engagement**: This project will provide information to the Harney Basin Wetland Initiative, biologists, birders, and the general public about waterfowl, waterbird, songbird, shorebird, and other bird guild use of the flood-irrigated ranchlands surrounding Burns. Summary results be included in reports / infographics.

PROTOCOL FOR DATA COLLECTION

Our aim with this protocol is to achieve reasonable standardization of effort among observers, while keeping the methods simple and as close to normal recreational birding as possible and allowing for personal freedom/flexibility. In our experience, an approach that allows for such flexibility for volunteers helps to maximize volunteer effort and thus to ensure adequate sample sizes in the datasets that result.

- (1) This project requires a vehicle, spotting scope and/or binoculars, and ability to use eBird.
- (2) New eBird hotspots have been established for these six sites ([Project IBiS-SDB](#), [Project IBiS-Ly Ranch](#), [Project IBiS-HCC](#), [Project IBiS-Meadow](#), [Project IBiS-ARC2](#), and [Project IBiS-EOARS](#)).
- (3) Target survey period is spring migration: 15 March to 30 June. However, we encourage you to conduct surveys outside of this preferred survey window. In particular, data collection later in the summer will allow some assessment of post-breeding bird use (e.g. Sandhill Cranes). Year-round data will also be helpful for creating a more complete understanding of bird use of the Silvies Floodplain.
- (4) You may run your route anytime during daylight hours. We will be able to sort data by time of day in order to tease out any strong effects.
- (5) Stop and identify and count all birds seen within the survey area, including birds on land, in water, and flying over the survey area. The minimum time spent at the site to make the count should be 30 minutes (15 for smaller sites). You should split this time up by surveying along the marked stopping points along the designated road-based transect (see maps below). Surveys can be done from either direction on the road (e.g. run north or south), though please use the pull-outs and spots on the shoulder marked on the maps (points with stars).
- (6) Please bring a scope and/or binoculars on each visit so you can obtain full views of all areas, and make a reasonable attempt to record numbers of all species that you see or hear within the designated area depicted on the maps.
- (7) Enter all data into eBird, using the Project IBiS-SDB, Project IBiS-Ly Ranch, Project IBiS-HCC, Project IBiS-Meadow, Project IBiS-ARC2, and Project IBiS-EOARS hotspots. You may enter data directly from the field with a phone app or afterwards from written notes made in the field. Please try to enter data as soon as possible after your visit so as to ensure accuracy, and remember to double-check your entries before clicking “submit”.
- (8) When entering data in eBird please use the ‘[Area](#)’ survey method. To do this, you’ll need to select ‘Other’ and then use the dropdown menu to find ‘Area.’ In the ‘acres’ box, please use the acres in the table below.
- (9) Make a brief description of weather conditions during your survey, and note whether you feel the weather had an adverse impact on the number or detectability of birds. This can be written in the Comments section. Additionally, please note whether or not there is visible water present in the field when you conduct your survey. In your notes, please provide an estimate of how much water is in the field. For example, in a field with only a stock pond you might say ‘water present at eastern edge of field in a

possible stock pond.’ In a field that has moving water (e.g. in channels) you might say ‘water present in channels in field.’ Lastly, if the field is flooded, you might say ‘water present, field flooded, water level with black-necked stilt bellies.’ If you are comfortable estimating what percentage of the field is covered by water, that is also okay.

SURVEY SITES

Hotspot name	LOCATION	Area (acres)	MAP
Project IBiS-SDB	Stanclift/Ebenray/Hwy 20	87	Map 1
Project IBiS-Ly Ranch	Fry Rd./Hwy 78	305	Map 1
Project IBiS-HCC	Hwy 205/Hotchkiss Ln.	470	Map 2
Project IBiS-Meadow	W of Egan on Hotchkiss	140	Map 2
Project IBiS-ARC2	E of Project IBiS-EOARS	109	Map 3
Project IBiS-EOARS	Hwy 205/Greenhouse Ln.	500	Map 3

DATA ANALYSIS

Descriptive analyses will be used to summarize avian abundance and diversity at each site, combined across sites and years and seasons depending on the amount of quality data received. Species diversity will be assessed using the Shannon-Wiener index. Species abundance will be a measure of relative abundance per unit effort.

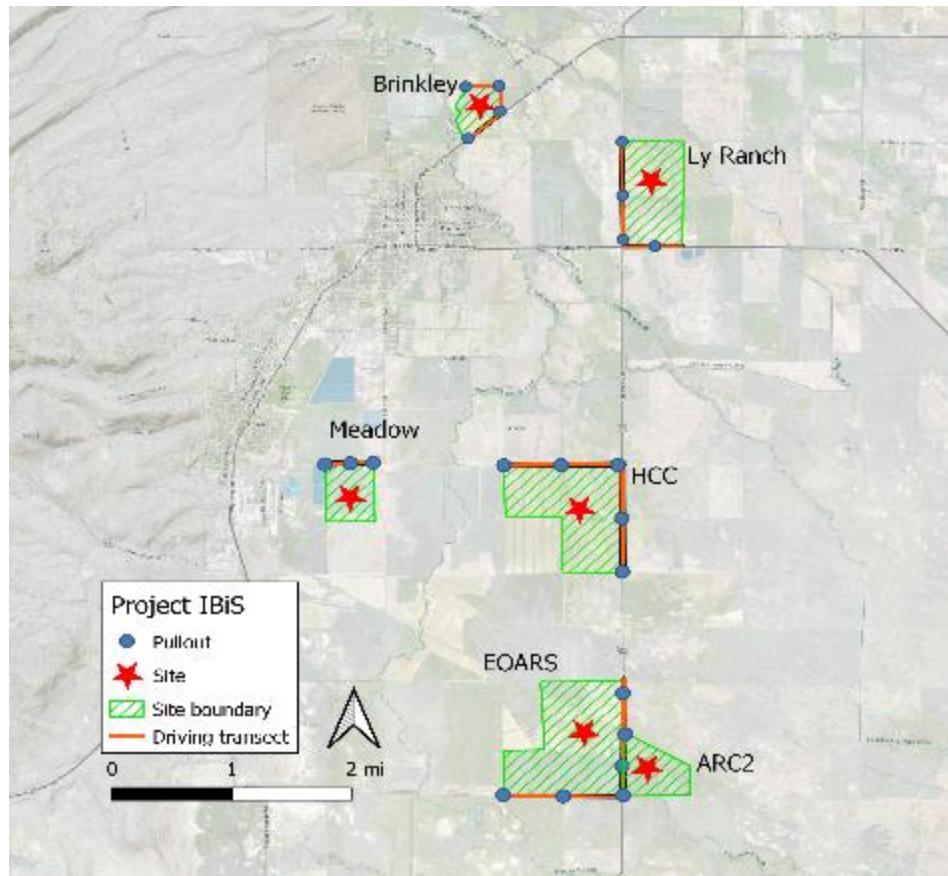
THANK YOU!

Thank you for your participation in this project! If you have any questions, please contact Teresa Wicks (twicks@audubonportland.org) or Joe Liebezeit (jliebezeit@audubonportland.org)

MAPS

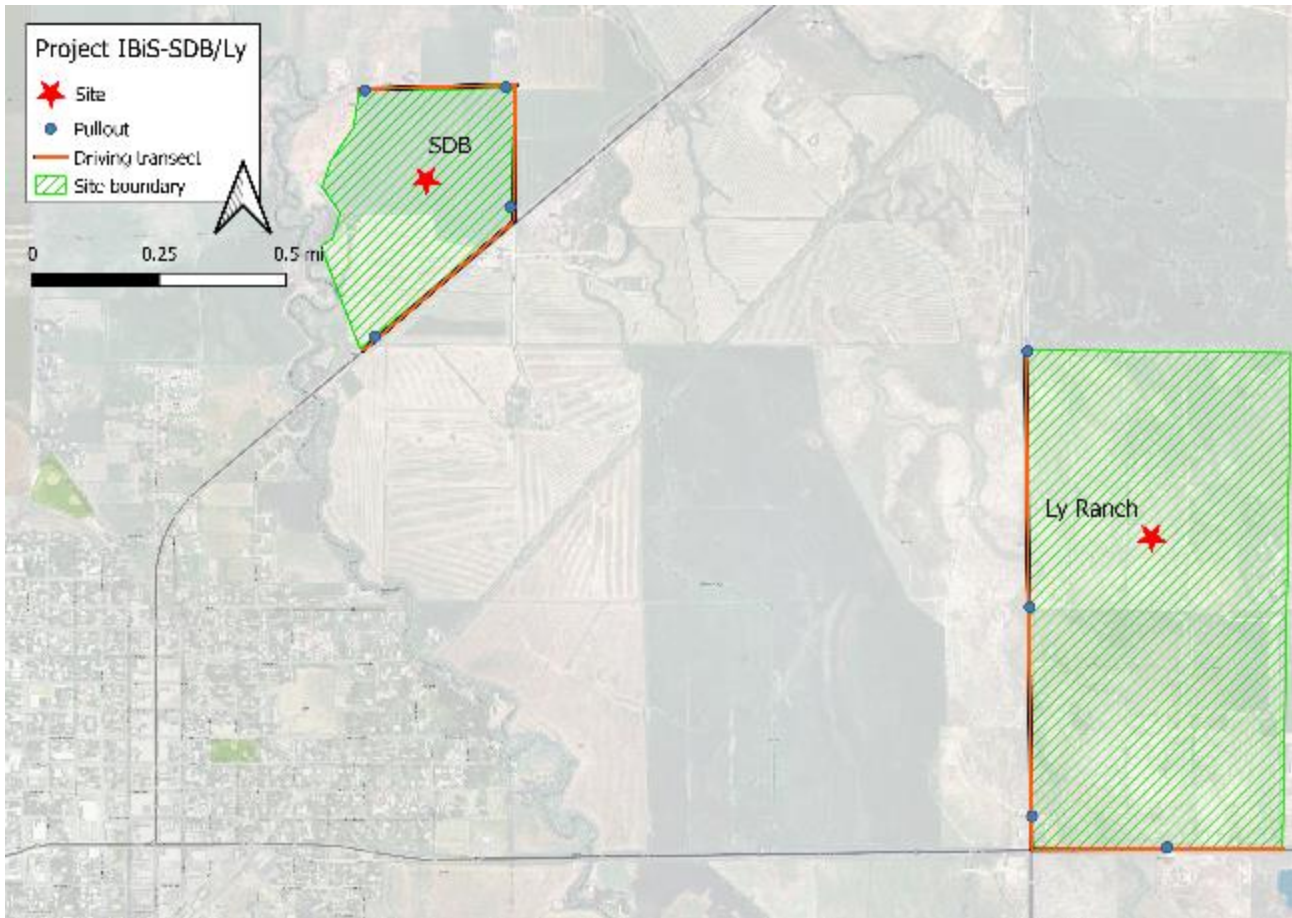
*****Please do not enter the areas you are surveying or drive up driveways associated with these survey areas. These are private property. The ranchers are supportive of the bird counts, but please respect their property. All efforts to count birds should happen from public roads (e.g. Fry Rd).*****

Project Map



The six focal properties for this project can be run in the order that is most convenient for you. Because of their locations, it can be easiest to conduct surveys in a clockwise or counter clockwise manner, starting at either SDB or Ly Ranch. It is also possible to run these surveys starting on Greenhouse, with EOARS, ARC2, north to HCC, west to Meadow, then northeast to SDB and Ly Ranch. Again, whichever combination is most convenient for you will work for this survey.

Map 1



SDB:

Directions from Burns to SDB (suggested to travel to from Stanclift road to Ebenray Rd): From Safeway in Burns, travel north on Broadway Ave to Foley Rd. Travel north on Foley to Stanclift. Travel east on Stanclift .65 miles. Transect starts just after the small upland area with a driveway on south side of road. Survey the field south of Stanclift. The transect runs along Stanclift, south on Ebenray, and southwest on Hwy 20 and is approximately 1 mile long. Points on this transect are around 1/3 mile apart.

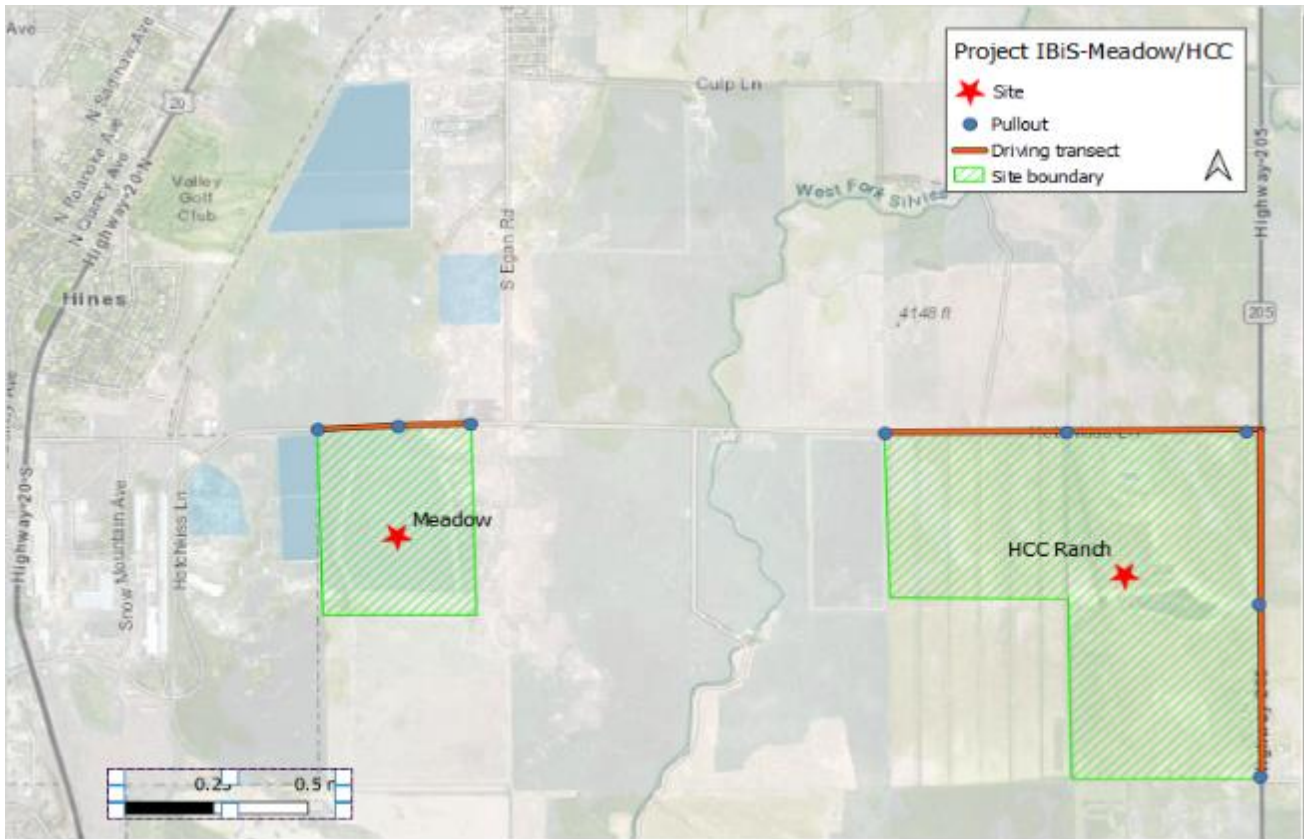
Pull out	Lat/Long coordinates
South side Stanclift Rd. pull out just past driveway.	43.607456/119.046411
South side of Stanclift Rd., pull onto shoulder before stop sign.	43.607516/119.040525
West side of Ebenray Rd., pull onto shoulder before stop sign. Please be sure to pull over BEFORE the stop sign.	43.603769/119.040579
North side of Hwy 20, before driveway. Pull completely off road onto shoulder.	43.600958/119.046271

Ly Ranch:

Directions from Burns to the Ly Ranch (suggested to travel Fry Ln. south-north, from Hwy 78 to Hwy 20): From the Safeway in Burns, travel east on Monroe (Hwy 78) to the Burns Gravel Ponds. Use the gravel ponds as a turn around. **Do not pull into the driveway on the northside of the road.** From the Burns Gravel Ponds, drive west about ¼ mile to the pullout. Survey the field to the north. From there drive another ¼ mile to Fry Ln. Turn north (right) on Fry Ln. The first pullout on Fry Ln. is just after you turn. Each pull-out is approximately .5 miles from the previous pullout. This road transect is 1 mile long.

Pull out	Lat/Long coordinates
North side of Hwy 78, approximately .5 miles from Fry Ln.	43.585965/ -119.014763
East side of Fry Ln, pull out at the corrals, just after the turn from Hwy 205	43.586846/ -119.020058
East side of Fry Ln, approximately .5 miles from Hwy 205, park in graveled access road BEFORE gate	43.592789/ -119.020149
East side of Fry Ln, approximately 1 miles from Hwy 205, park in graveled access road BEFORE gate	43.600048/ -119.020231

Map 2



Meadow:

Directions from Burns to Meadow: From Safeway in Burns, travel south/southeast on Monroe/Hwy 20 to Lottery Ln (near the mill smoke stack). Drive east on Lottery Ln to Hotchkiss Ln. Turn northwest (left) onto Hotchkiss Ln. The transect starts just east of the sewage pond.

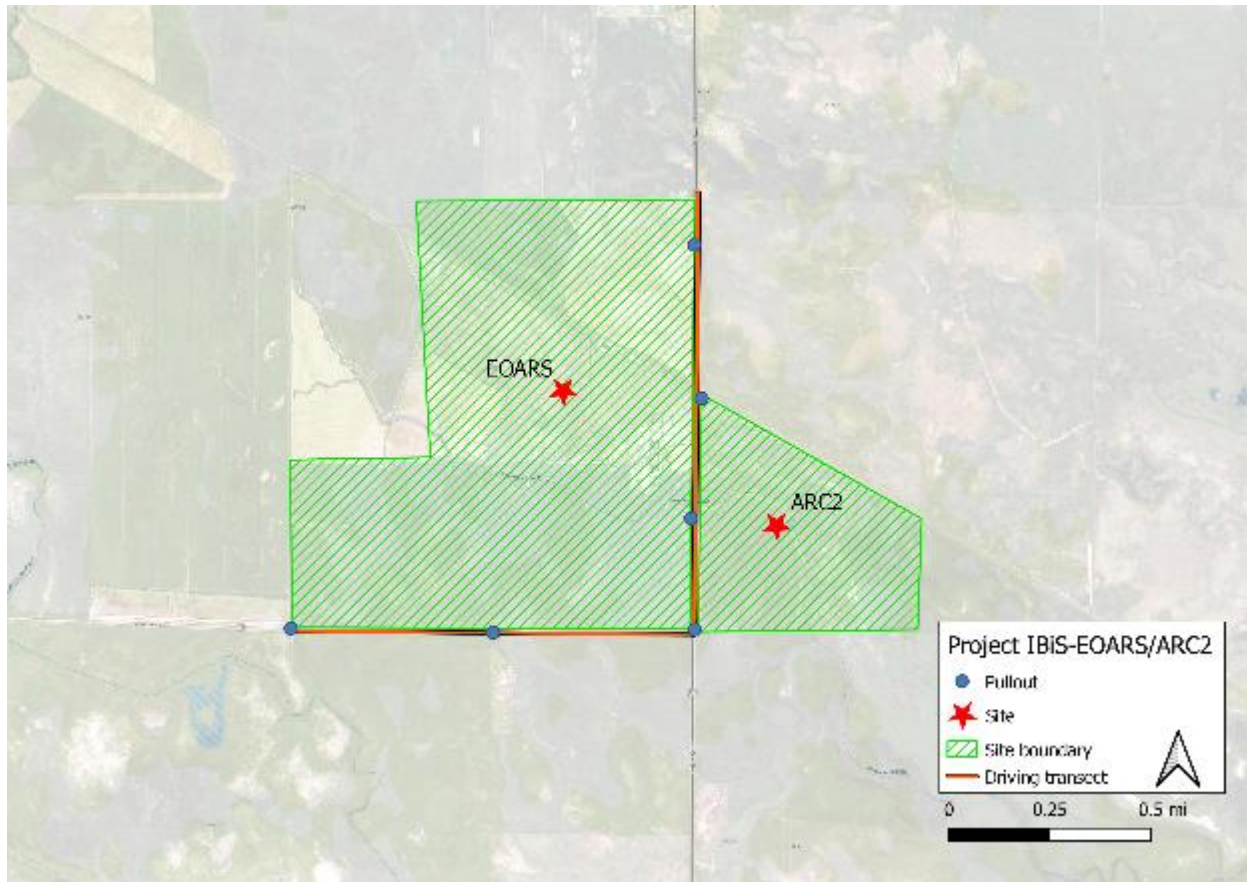
Pull out	Lat/Long coordinates
South side of Hotchkiss Ln, .8 miles from Hwy 20.	43.556533/119.069590
South side of Hotchkiss Ln, 1.3 miles from Hwy 20, across from pond.	43.556750/119.061691
**alternative pullout: south side of Hotchkiss Ln. approximately 1.0 miles from Hwy 20.	43.556740/119.064371

HCC Ranch:

Directions from Burns to HCC Ranch: From Safeway in Burns, travel east on Monroe/Hwy 20 approximately 2 miles to the intersection of Fry Rd and Hwy 205. Turn right onto Hwy 205 and travel south approximately 2 miles to Hotchkiss Lane. The intersection of Hotchkiss and Hwy 205 is the northeastern corner of the Doverspike Ranch. From here there is an east/west transect extending approximately 1 mile along Hotchkiss Ln. and a north/south transect that runs approximately 1 mile south along Hwy 205. Pullouts are approximately .5 miles from each other.

Pull out	Lat/Long coordinates
South side of Hotchkiss Ln, 1 mile from Hwy 205, pull into access road entrance BEFORE gate/fence.	43.556409/119.039867
South side of Hotchkiss Ln, .5 miles from Hwy 205, use shoulder above culvert. Pull off as far as you are comfortable (ideally with two tires off road).	43.556448/119.030336
South side of Hotchkiss Ln, before intersection with Hwy 205.	43.556469/119.020907
West side of Hwy 205, approximately .5 miles from Hotchkiss Ln.	43.549272/119.020258
West side of Hwy 205, approximately 1 mile from Hotchkiss Ln, near mailboxes	43.542086/119.020188

Map 3



EOARS:

Directions from Burns to Eastern Oregon Agriculture Research Station (EOARS): From Safeway in Burns, travel east on Monroe/Hwy 20 approximately 2 miles to the intersection of Fry Rd and Hwy 205. Turn right onto Hwy 205 and travel south approximately 4 miles to the northeast corner of the EOARS property. From here there is a north/south transect that extends approximately 1 mile to the intersection of Greenhouse Ln and Hwy 205. A second transect extends east/west along Greenhouse Ln. approximately 1 mile to the southwest corner of the EOARS property (the line ends at the feedlot).

Pull out	Lat/Long Coordinates
Large gravel pull out near fenced area with sagebrush and well access.	43.525663/119.020088
Large gravel pull out with interpretive panel, just after guardrails.	43.515893/119.020228
Narrow pull out at shoulder of road, do not pull into the driveway on the south side of road. Use shoulder,	43.511806/119.029999
Dirt pull out at eastern edge of driveway for feedlot.	43.511959/119.039965

ARC2:

From the last point of the EOARS route, near the feedlot, travel back to Hwy 205. From Safeway in Burns, travel east on Monroe/Hwy 20 approximately 2 miles to the intersection of Fry Rd and Hwy 205. Turn right onto Hwy 205 and travel south approximately 4.5 miles to the northwest corner of the ARC2 property. From here there is a north/south transect that extends approximately 0.5 miles to the intersection of Greenhouse Ln and Hwy 205.

Pull out	Lat/Long Coordinates
Large gravel pull out near green gate across from intersection of Hwy 205/Greenhouse Ln.	43.511852/119.020053
Large gravel pull out with interpretive panel, just after guardrails.	43.515893/119.020228
Pull out at past slough,	43.520237/119.019825