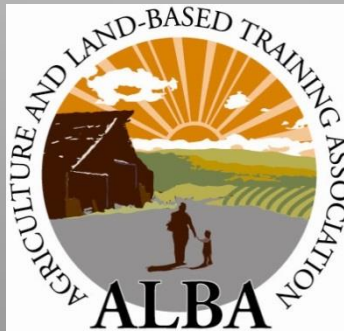


Voluntary Habitat Restoration and Species Recovery Efforts

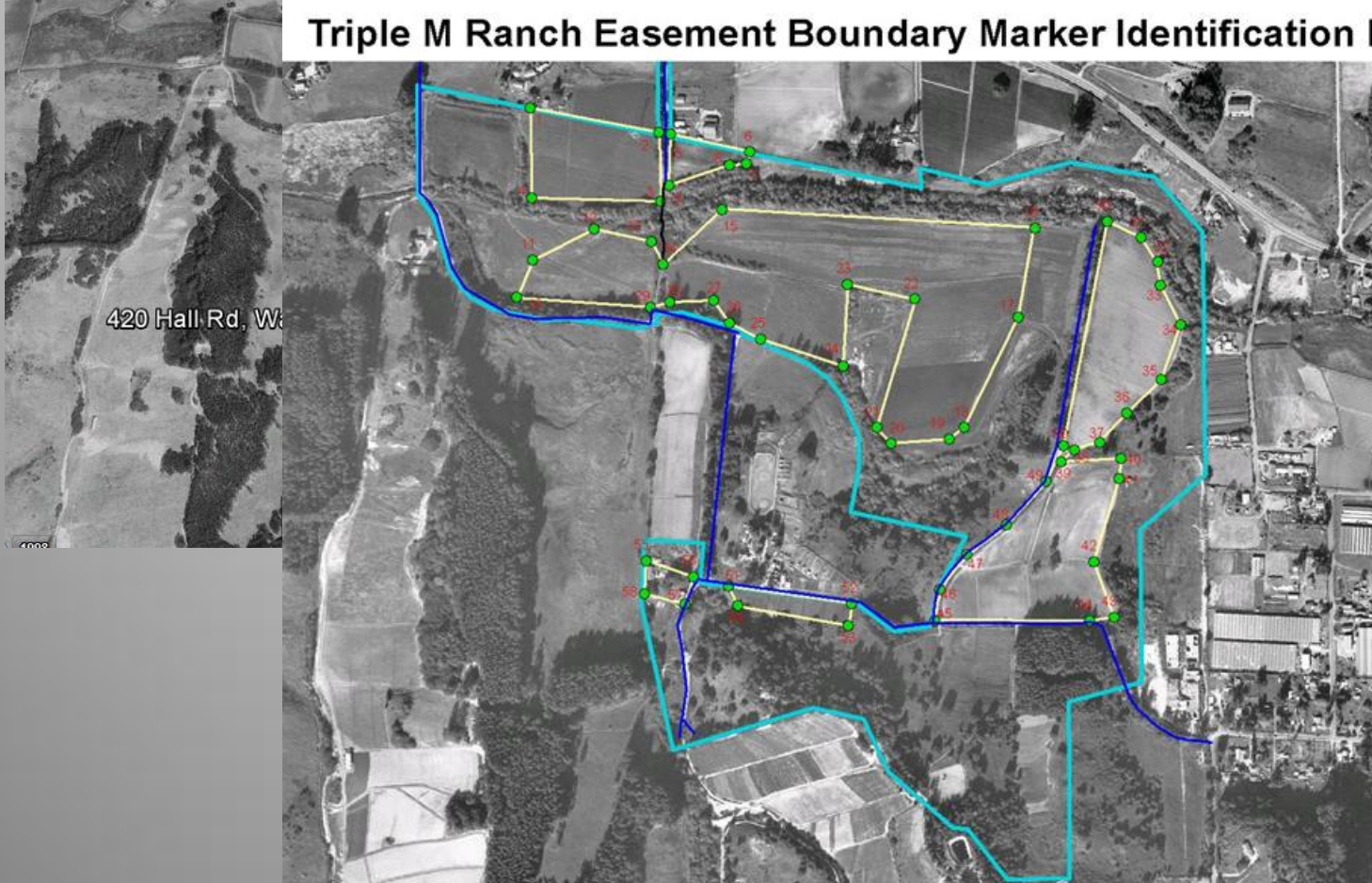
Triple M Wetland Restoration Project 2012



Triple M Conservation Easement



Triple M Ranch Easement Boundary Marker Identification Numbers



420 Hall Rd, W

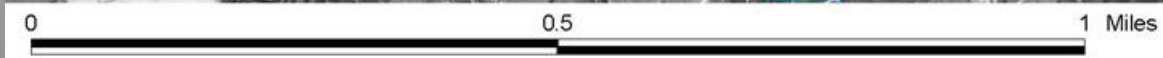
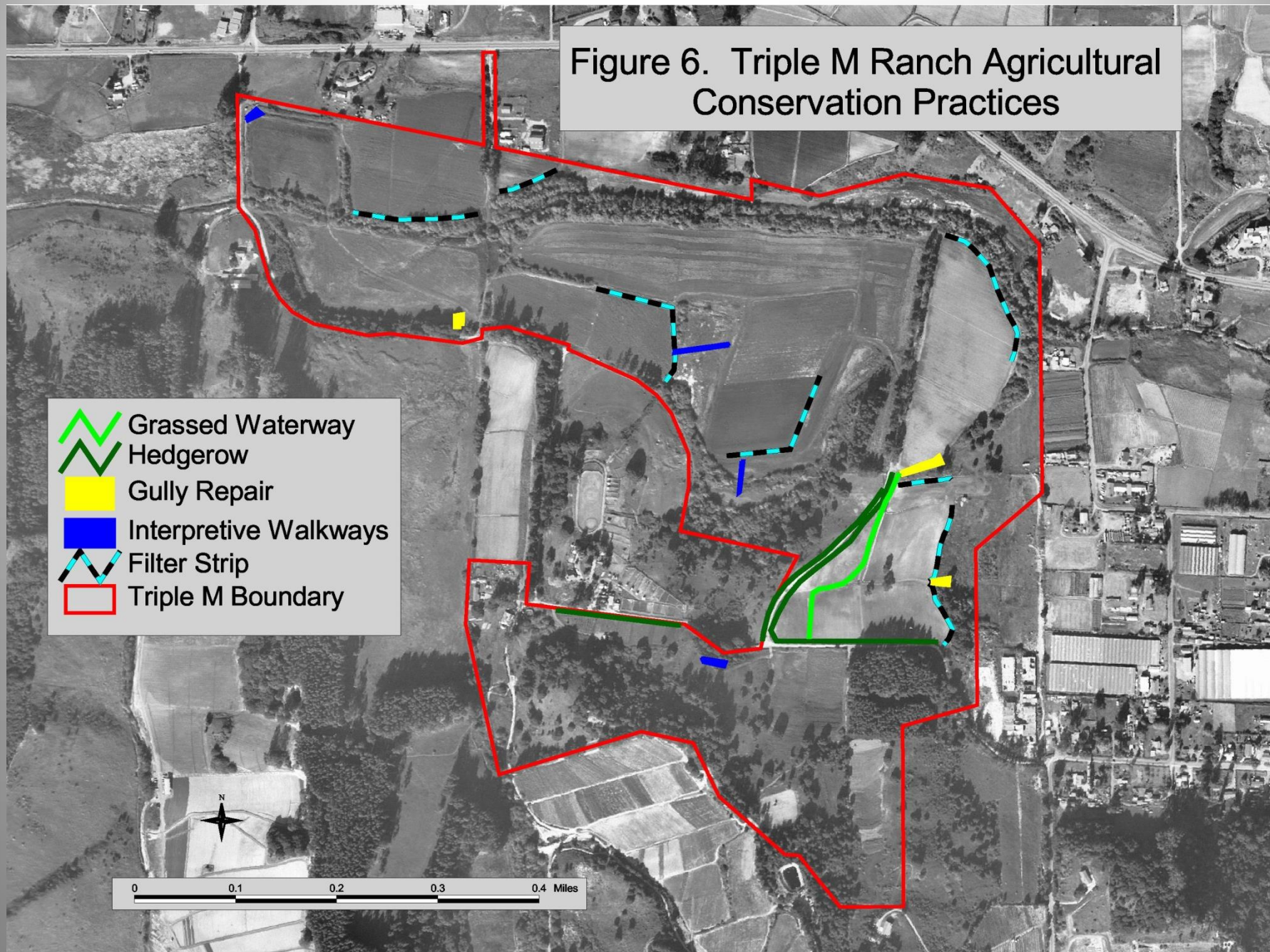


Figure 6. Triple M Ranch Agricultural Conservation Practices



Project Goals

- Improve water quality;
- Restoring diverse plant communities;
- Improve and maintaining habitat for Threatened and Endangered species;
- Provide flood storage;
- Connect Carneros Creek to its historic flood plain; and
- Collect research data *California red-legged frog* (CRLF, *Rana draytonii*); *Santa Cruz Long-toed salamander* (SCLTS, *Ambystoma macrodactylum croceum*); and *California Tiger Salamander* (CTS, *Ambystoma californiense*)



5 Phases

1. Planning-4 years (2005)
2. Permitting-3 years (2009)
3. Construction-2 months (2012)
4. Revegetation-Nov 2012 and May 2013
5. On-going Management and Permit Compliance (10 years)



Planning



DENISE DUFFY & ASSOCIATES, INC.



Project Conceptual Design Map

Figure
2

Permits



2009-2012

- ❑ **Army Corps of Engineers Section 404 Nationwide Permit**
 - ❑ **USFWS Biological Opinion, Section 7 Consultation**
- ❑ **Regional Water Quality Control Board Section 401 Certification**
- ❑ **CA DFW- Fully Protected Permit** permit incidental take for SCLTS (*Ambystoma macrodactylum croceum*)
- ❑ **CA DFW 1602 Streambed Alteration Agreement-** project impact area within a riparian area
- ❖ **CA DFW- Safe Harbor Agreement 2089-**incidental take during project activities for CTS (*Ambystoma californiense*)
- ❑ **Monterey County grading permit** received August 24, 2012-
- ❑ **WDID#** received August 24, 2012-needed to monitor SWPP



CONSTRUCTION





REVEGETATION





Connectivity with Carneros Creek



May 1, 2013 Larval Sampling



How to measure success of project?

Project Goals

1. Improve water quality;
2. Restore diverse plant communities;
3. Improve and maintain habitat for T & E species;
4. Provide flood storage;
5. Connect Carneros Creek to historic flood plain; and
6. Collect research data – T&E species

Success?

1. Currently being assessed
2. Not 100%
3. SLCTS- success so far
4. Will continued to be assessed in non-drought years
5. Will continued to be assessed in non-drought years
6. SCLTS only species observed in created wetland ponds

Questions?

