

Salt Cedar Beetle Project Summary, November 2011

White River Municipal Water District

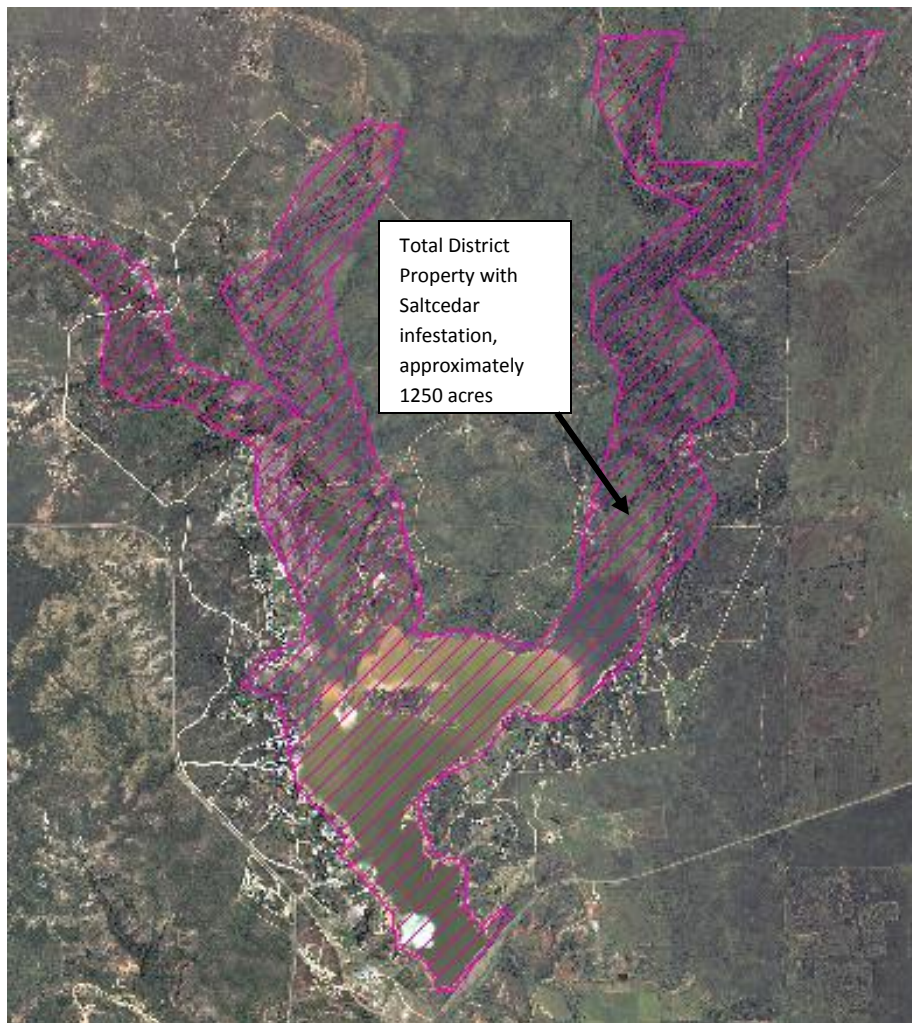
Crosby County, Texas

Prepared by: Charlie Morris, District Conservationist

USDA - Natural Resources Conservation Service

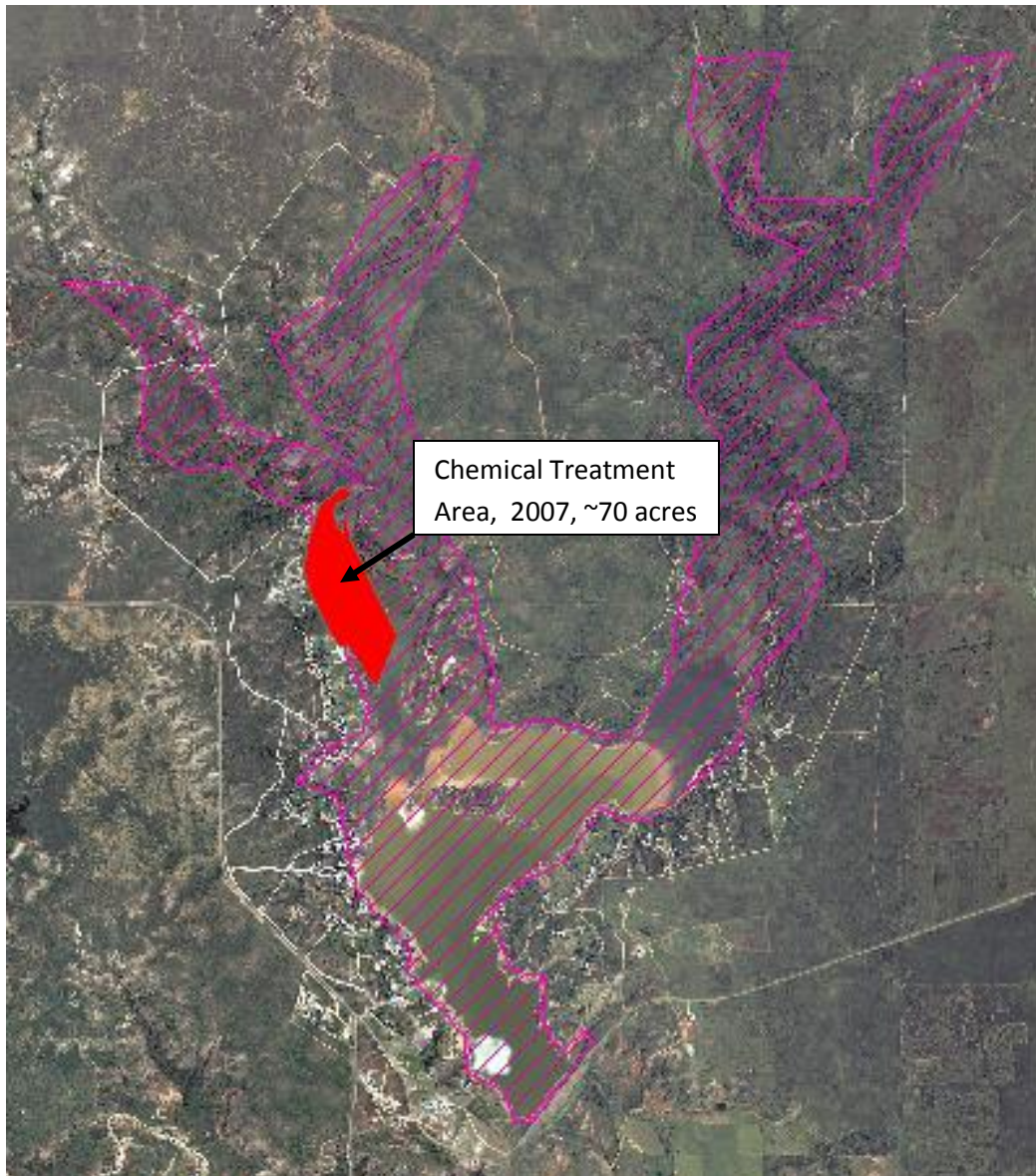
Spur, Texas

Combined area of Saltcedar Infestation on WRMWD Property. Approximately 1250 total acres, discounting the reservoir area. Most of these acres are sparsely populated with Cedar. However, sparse populations, left unchecked, are anticipated to increase in plant density and overall infestation.



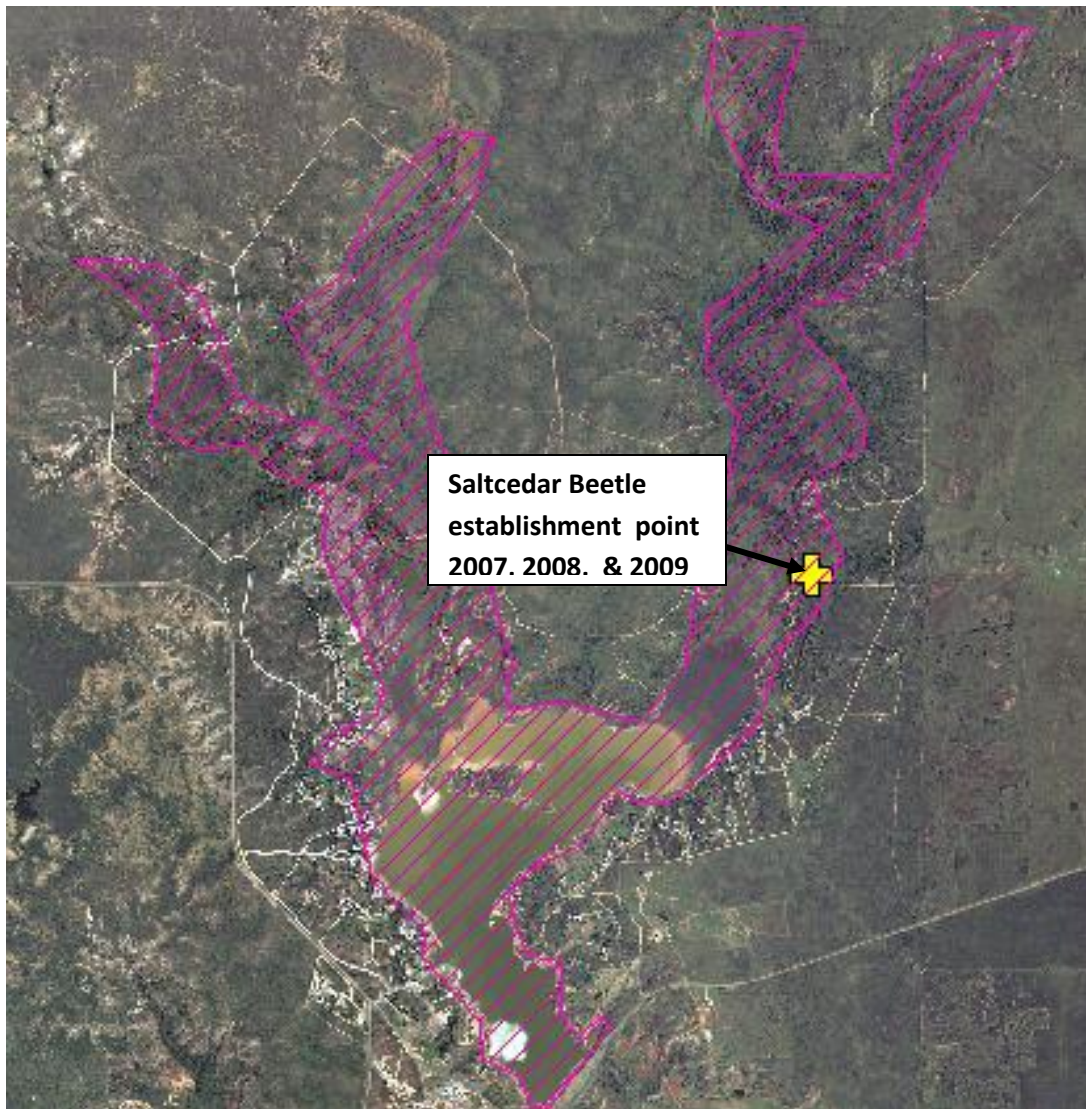
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In September of 2007, approximately 70 acres of dense Saltcedar was chemically treated with Arsenal and Glyphosate at a total cost of \$225.00/acre (total cost \$15, 750.00) Control approached 100%. However, the soil surface remained totally void of protective plant cover for two full years.



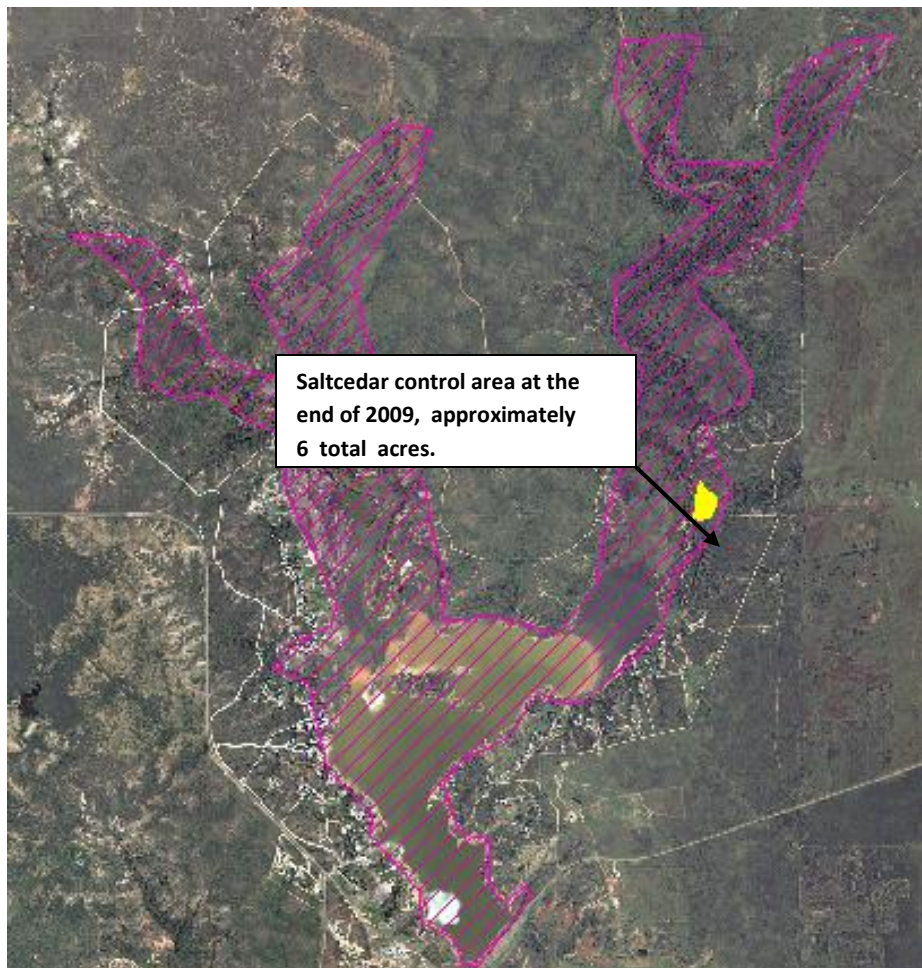
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Texas Agrilife Extension Service began initial stocking attempts of Saltcedar beetles in 2007. No success was noted with this initial stocking. Texas Agrilife repeated stocking efforts in 2008 at the same location.



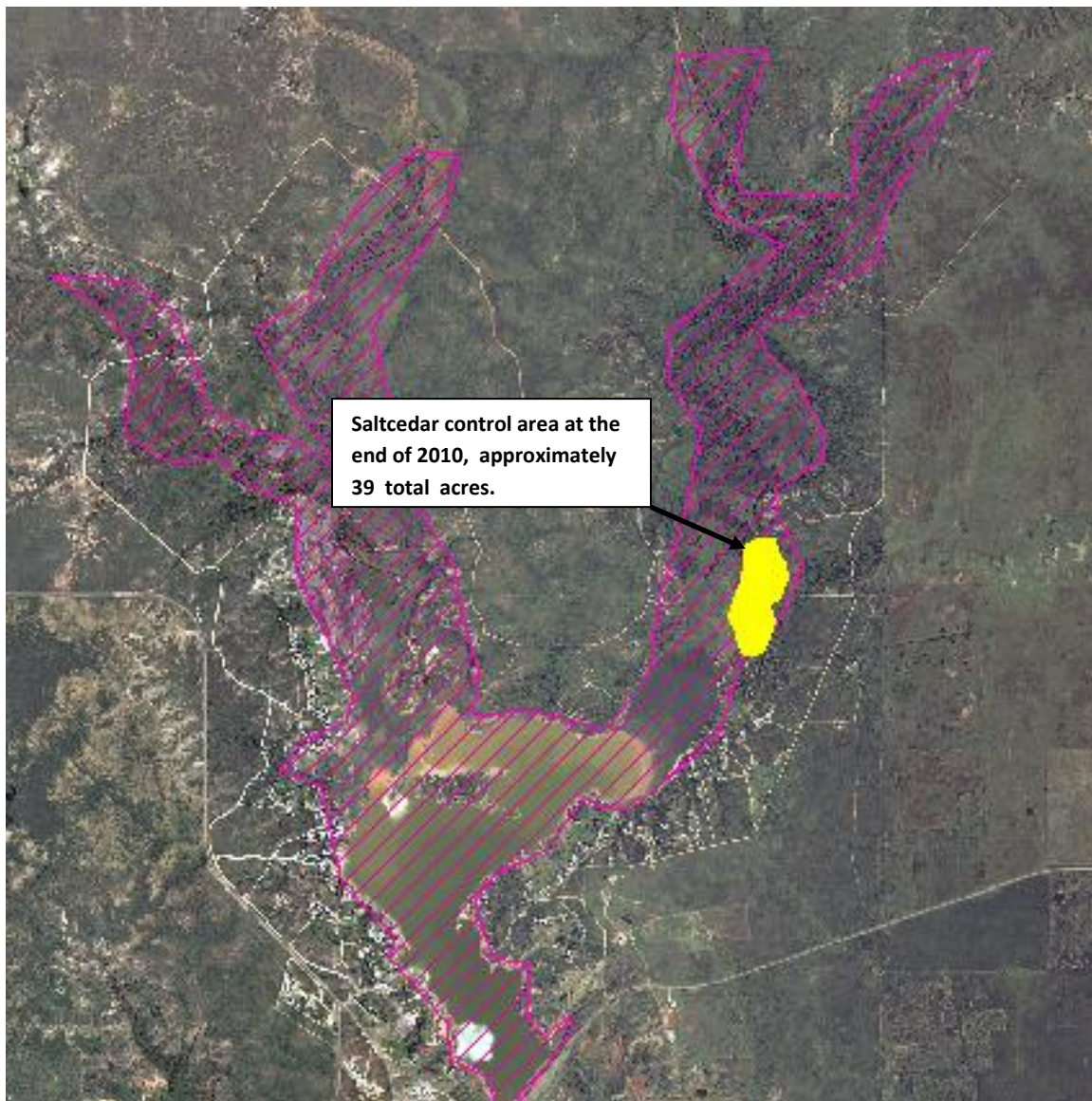
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In 2009 White River Water District made a third attempt at stocking Saltcedar beetles. During this stocking effort, some remnant beetle activity was noted from prior stocking efforts by Texas Agrilife. This stocking attempt combined with remnant beetles was considered a success. By frost of 2009, approximately six (6) total acres of Saltcedar were defoliated. No additional stocking attempts have been conducted.



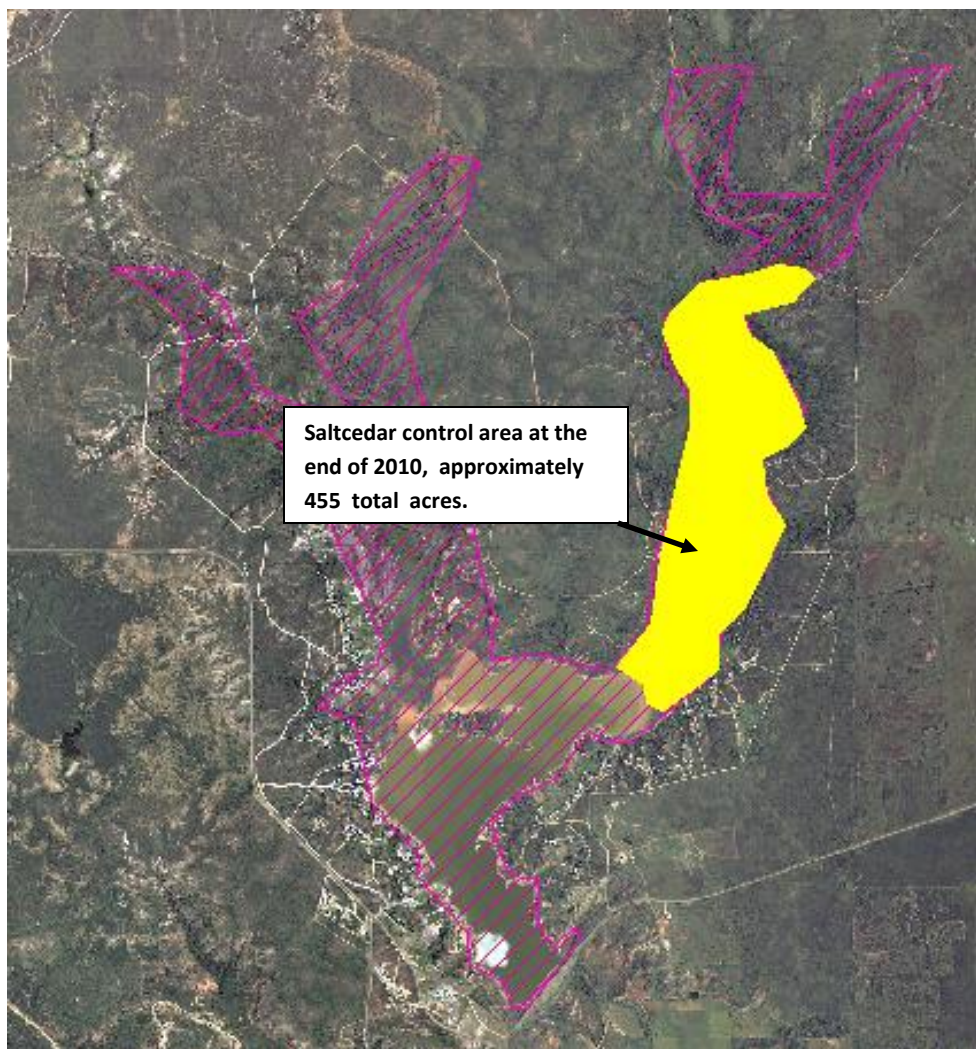
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At the end of the 2010 growing season approximately 39 acres of Saltceder were defoliated. The winter of 2009/2010 was mild and wet. A mild spring was recorded with minimal late freeze. These conditions were recognized as ideal for the beetle.



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In early November, 2011 a detailed survey was conducted to determine spread of the Saltcedar beetle on White River Property. Remnant populations of beetles were detected, noted, or reported across all areas of Saltcedar infested district property. The area of total defoliation had grow from approximately 39 acres in 2010 to 455 acres at the end of the growing season, 2011.



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Summary: This White River beetle establishment is one of the Northern most established populations. Winter and early spring survival of the beetle has been a challenge across Texas. The winter of 2010/2011 produced record cold in January and February. Conditions were extremely dry throughout the entire period. A harsh late freeze came in the spring of 2011. Conditions precluded what was expected to be devastation for the entire Beetle establishment project at White River. The inverse occurred.

Based on historical spread of the Saltcedar beetle in the Colorado River basin following successful establishment, a continual spread and sustained control of Saltcedar across the entire White River Watershed is anticipated.

Side notes:

- 1. It takes 3-5 years for the beetle to kill a Saltcedar. During this period, numerous defoliation, refoliation sequences will occur.**
- 2. The initial stocking at White River was the Uzbekistan. The second and third stockings with the Crete selection of the beetle. The Crete selection appears to have a higher stamina in more Northern establishment zones such as White River.**
- 3. The White River beetle colony could provide a stocking source of beetles for use across the surrounding area.**