



Figure 12. Seven lateral starter channels were cut into the main channel alignment. With the constant flow of water in and out of these starter channels, longer, meandering natural channels are expected to form over time.



Figure 13. Because construction on the main channel alignment and other projects aspects was complete by 11/15/2015, Hanford was able to complete the formation of the transition ramp in the remaining two weeks of our construction permit window. The final result is approximately 9 acres of transition ramp 120ft wide and 3ft tall from marsh plane to levee, a (40:1) slope, gently sloping habitat ramp. This portion of the project was projected to be shaped in 2017 and

revegetated thereafter. We were able to complete it 2 years ahead of schedule, revegetation will begin in 2016.



Figure 14. The completed Sonoma Creek Enhancement Project at high tide.



Figure 15. Before 11/20/2015 wildlife are already showing the use of this new habitat as waterbirds swim in the new channel alignment.



Figure 16. Refuge staff Biologist Meg Marriott is showing how quickly water is flowing off of the marsh (where she stands) into the new channel where it was once trapped on the marsh.



Figure 17. Marsh mounds will provide habitat for wildlife in high tide events. The channel, to the right of the two pictured marsh mounds, cannot be seen in these high tide events.



Figure 18. High tide refuge marsh mounds are already proving their necessity as migrating shorebirds, such as these migrating least and western sandpipers, use the elevated tops of the marsh mounds in the king tide events of late November 2015.