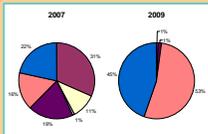
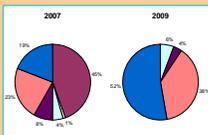
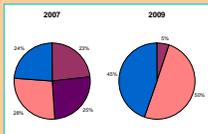




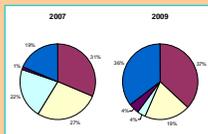
Vegetation Monitoring 2006 – 2009

West Pasture

In the West Pasture, removal of levees increased the influence of salt water in low-elevation areas (shown in green on the map at right.) As a result, vegetation in these areas is shifting toward salt marsh species. In addition, die-off of salt-intolerant and brackish species is increasing detritus, open water, and algae in these areas. Non-native grassland species are generally intolerant of both inundation and salts, and a marked decrease in these species can be seen in low-lying areas of the West Pasture.

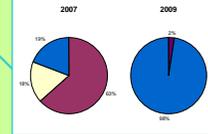
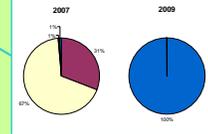
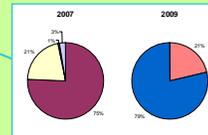
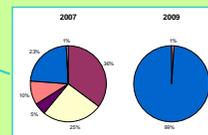


In areas of slightly higher elevation (shown in yellow-orange on the map at right), the species composition has shifted away from freshwater marsh species, due to the increase in salts.



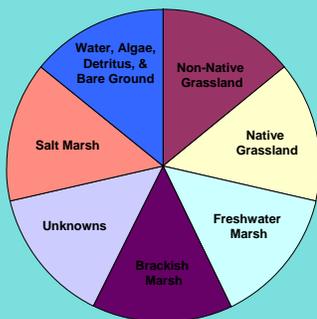
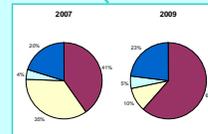
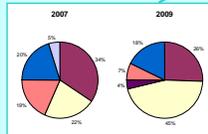
Northern East Pasture

In the East Pasture, daily tidal influence in areas that used to be leveed or ditched has made sweeping changes to vegetation. Much of the northern part of the East Pasture is saturated around the clock; the soil surface is covered by feet of water at high tide in some places. Almost all pre-restoration vegetation is gone from these areas, but salt and brackish marsh seedlings – such as pickleweed (*Sarcocornia pacifica*) and saltgrass (*Distichlis spicata*) – are beginning to emerge in those areas that are exposed at low tide.



Southern East Pasture

The southern portion of the East Pasture has the least tidal influence, and grassland vegetation communities are common here. While some of these communities have seen increases in native grassland species coupled with decreases in non-native grassland species (left), other areas show the opposite trend (right.) Some native grassland species – such as meadow barley (*Hordeum brachyantherum*) and wild rye (*Leymus triticoides*) – are salt-tolerant while many non-native species are not. It may be the case that in lower elevation areas (green on map above), native grassland species are winning the battle, whereas in higher elevation areas (red on map above), non-native grasses have the upper hand.



Water, Algae, Detritus, and Bare Ground



Freshwater Marsh Species



Native Grassland Species



Salt Marsh Species



Brackish Marsh Species



Non-native Grassland Species



Unknown Species



This category includes plants that could not be identified to species level.