

White Bear Lake Area Comprehensive Plan Study 9B

Model and Evaluate Raising White Bear Lake Outlet
Elevation - Update

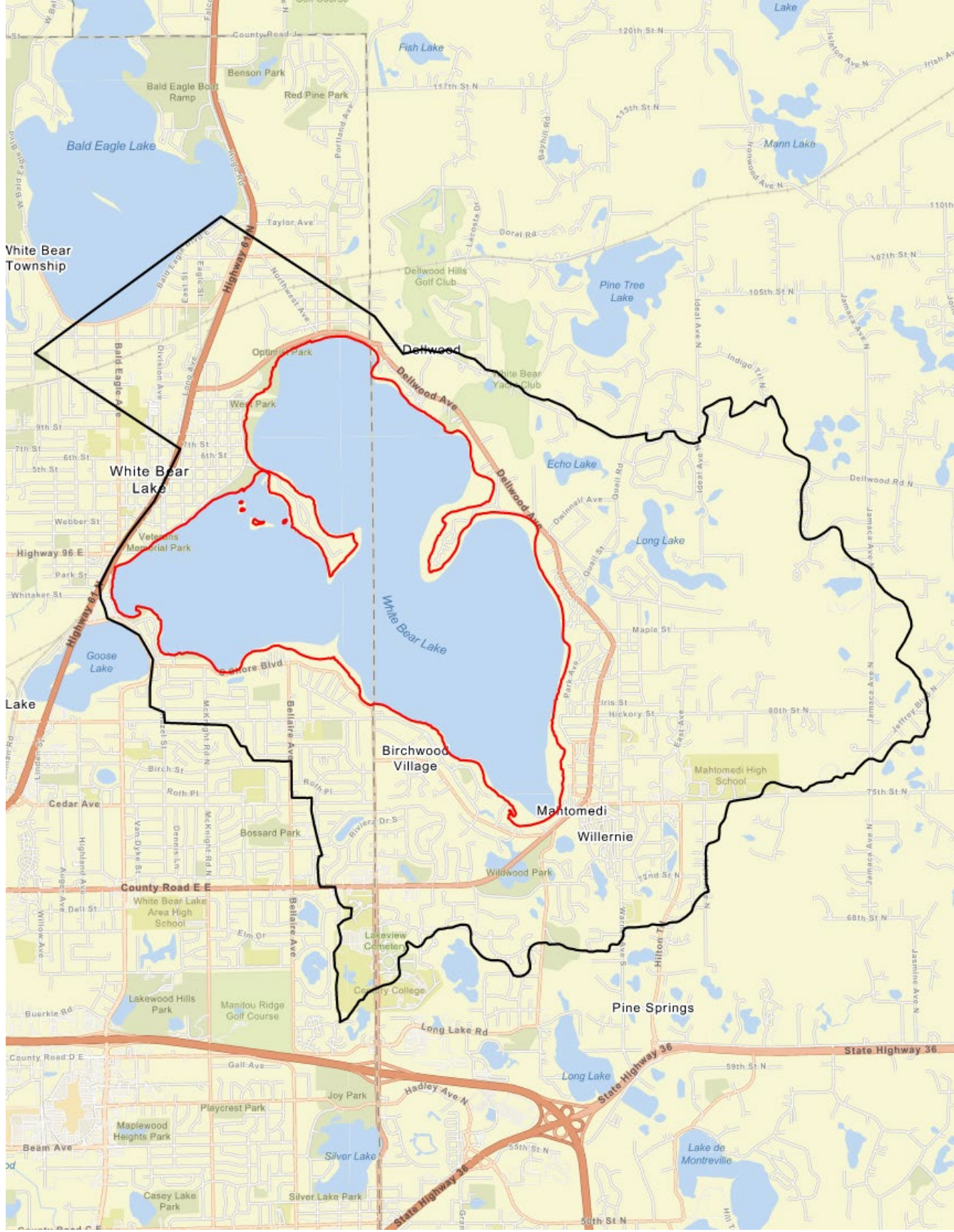
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Scope of study

- Data collection and screening-level GIS assessment of high-risk areas, survey lake outlets
- Develop 1D/2D model of White Bear Lake
- Assess risks to infrastructure
- Estimated costs
- Advantages/disadvantages of outlet modification
- Updates following 1/15/25 meeting
 - Easement review
 - Floodplain impacted structures review



Previous effort review

- Must demonstrate no-adverse impact for any changes to the outlet modification (increase discharge rate) to RCD 11
- Existing easements limiting water elevations on WBL
- Modeled modifications to outlet result in up to greater than 1 foot of rise in 100-year water surface elevation on WBL

Easements and lake elevations

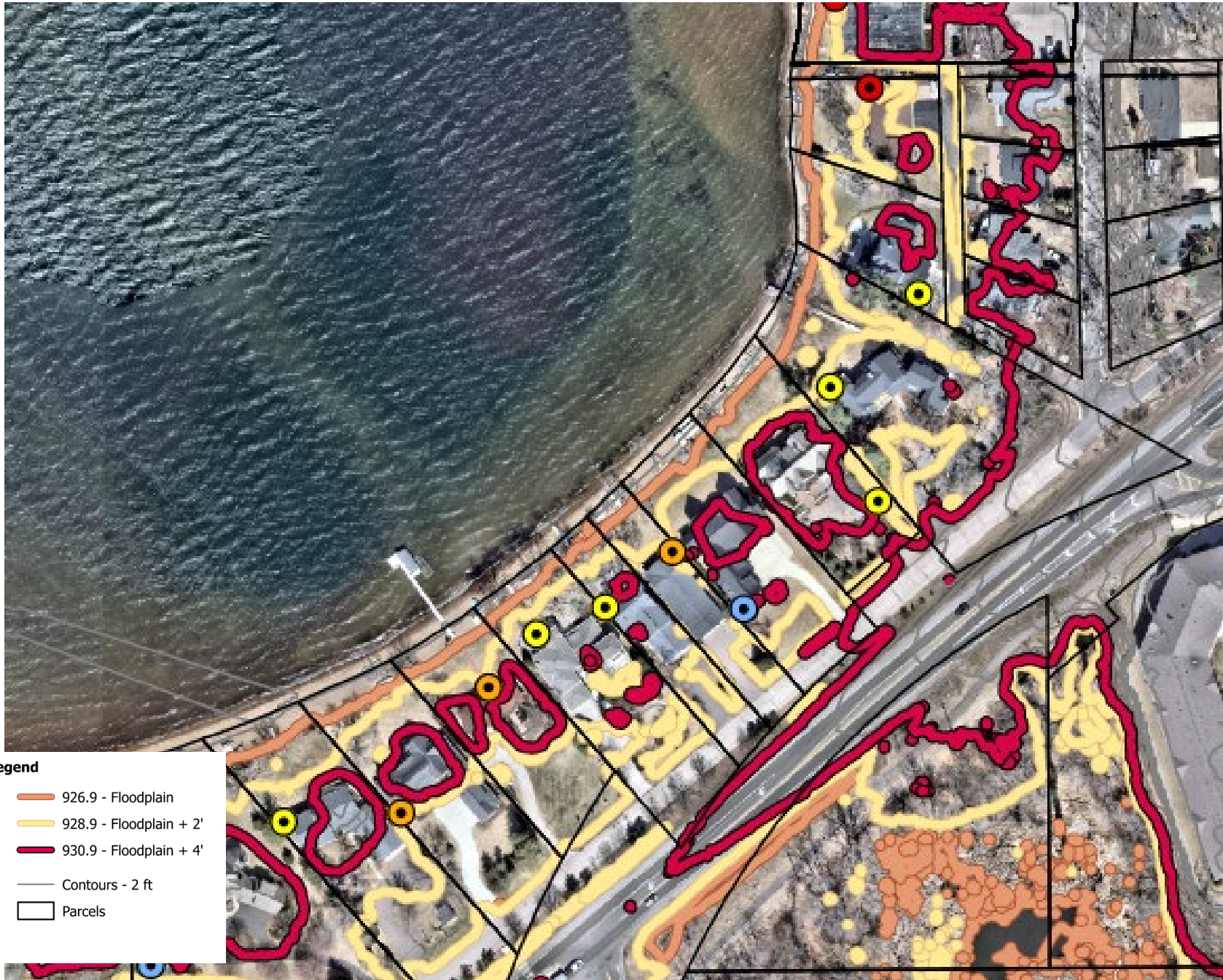
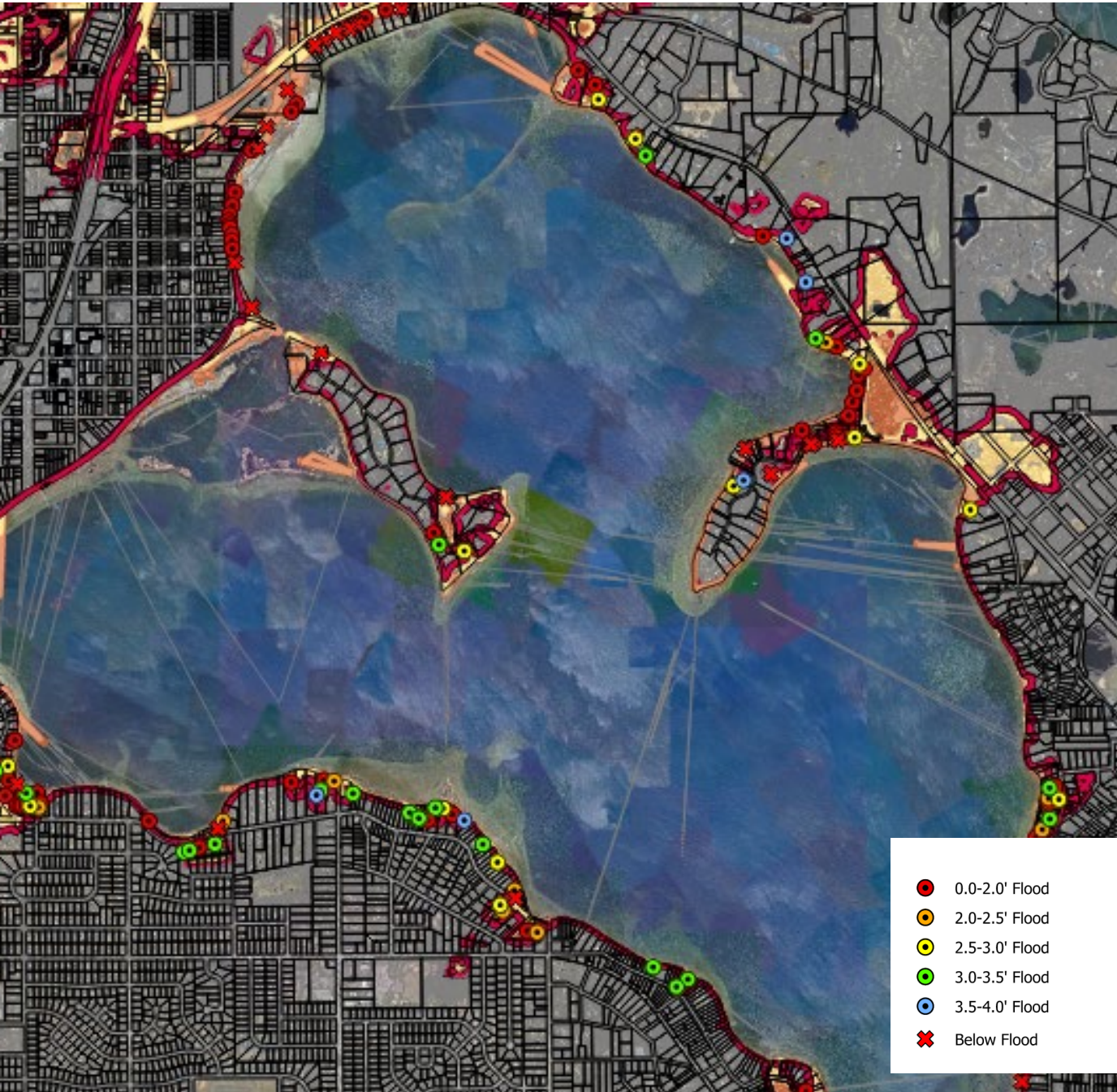
10 easement are in place around the lake with landowners that limit the permanent pooling elevation to elevation 924.7 within Hall's Marsh, which is directly connected to White Bear Lake.

Easement

For and in consideration of the granting of Permit Application No. 88-28 by the Rice Creek Watershed District Board of Managers, such granting of permit being considered valuable and hence valuable consideration, Ernest W. Jensen and Ruth Welter Jensen, husband and wife, and as Grantor, ("Grantors"), do hereby grant, and convey to the City of Birchwood Village and the Rice Creek Watershed District, an easement for the temporary storage and flowage of water that enters upon the land as a result of drainage and conservation practices under the jurisdiction and management of the Rice Creek Watershed District; however, in no instance shall the storage of water under this easement become permanent above the 924.7 contour. This easement covers the following described land:

That part of Lot 5, Block 1, Hall Addition, Washington County, Minnesota, which lies below the 926.7 contour, described as follows:

Impacted structures – Floodplain increase



Impacted structures and estimated costs

Elevation Band		Number of Impacted Structures		Estimated Cumulative Cost for Full Acquisition (\$ millions)
		Incremental	Cumulative	
Below 926.9	Below Floodplain	25	25	\$37.5
926.91-928.9	Within 2' of Floodplain	78	103	\$154.5
928.91-929.4	2-2.5' Above Floodplain	20	123	\$184.5
929.41-929.9	2.5-3' Above Floodplain	22	145	\$217.5
929.91-930.4	3-3.5' Above Floodplain	26	171	\$256.5
930.41-930.9	3.5-4' Above Floodplain	9	180	\$270.0

Average sale price of property on White Bear Lake = \$1.5 million

Study 9B conclusions - Recommendations

Due to challenges to increase discharge rate to mitigate for increase in modeled high-water levels of White Bear Lake, it is not recommended to continue to pursue outlet modifications of White Bear Lake at this time.

Questions