

WEEKEND Photorial

SUMP

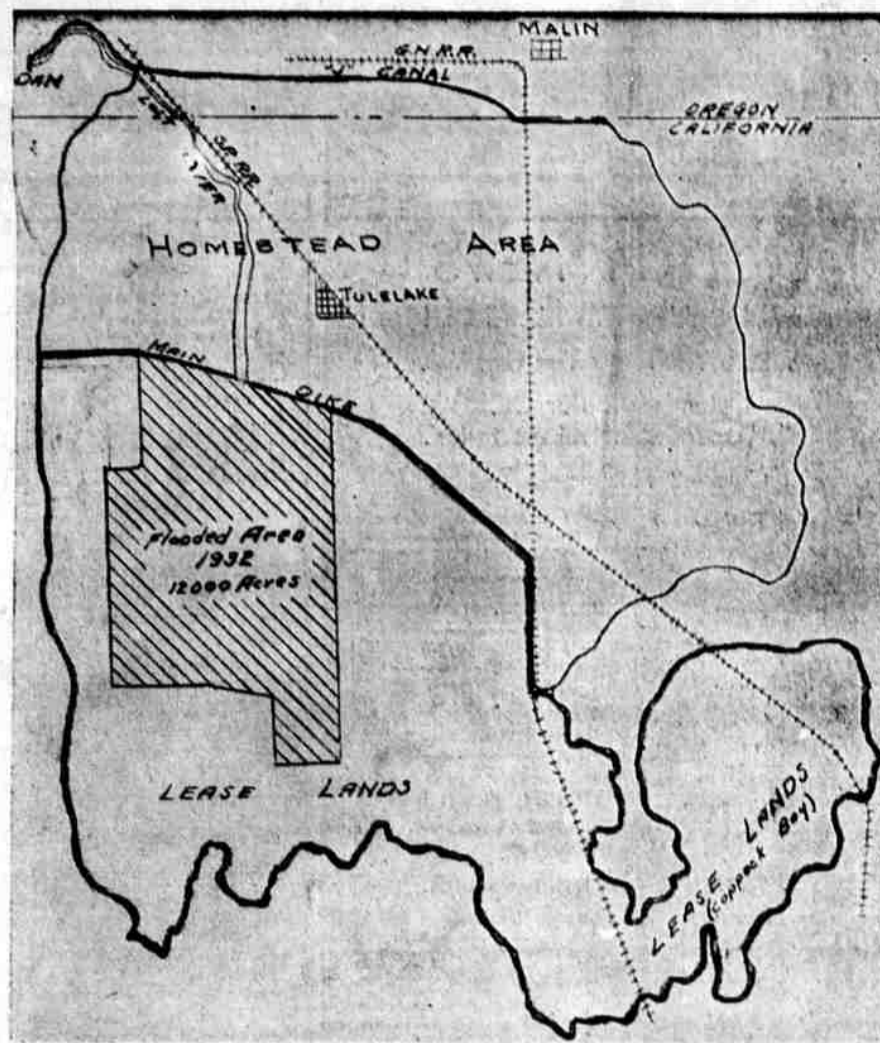
TULE LAKE was once a watered basin, receiving the flow of Lost river. It was a lake without an outlet.

A feature of the development of the Klamath reclamation project was the unwatering of a portion of this basin and opening of this land for homesteading. This was done by constructing dams to hold the waters back, by diverting Lost river water through a diversion canal into Klamath river, and by confining within dikes the water that did reach Tule lake through drainage or runoff.

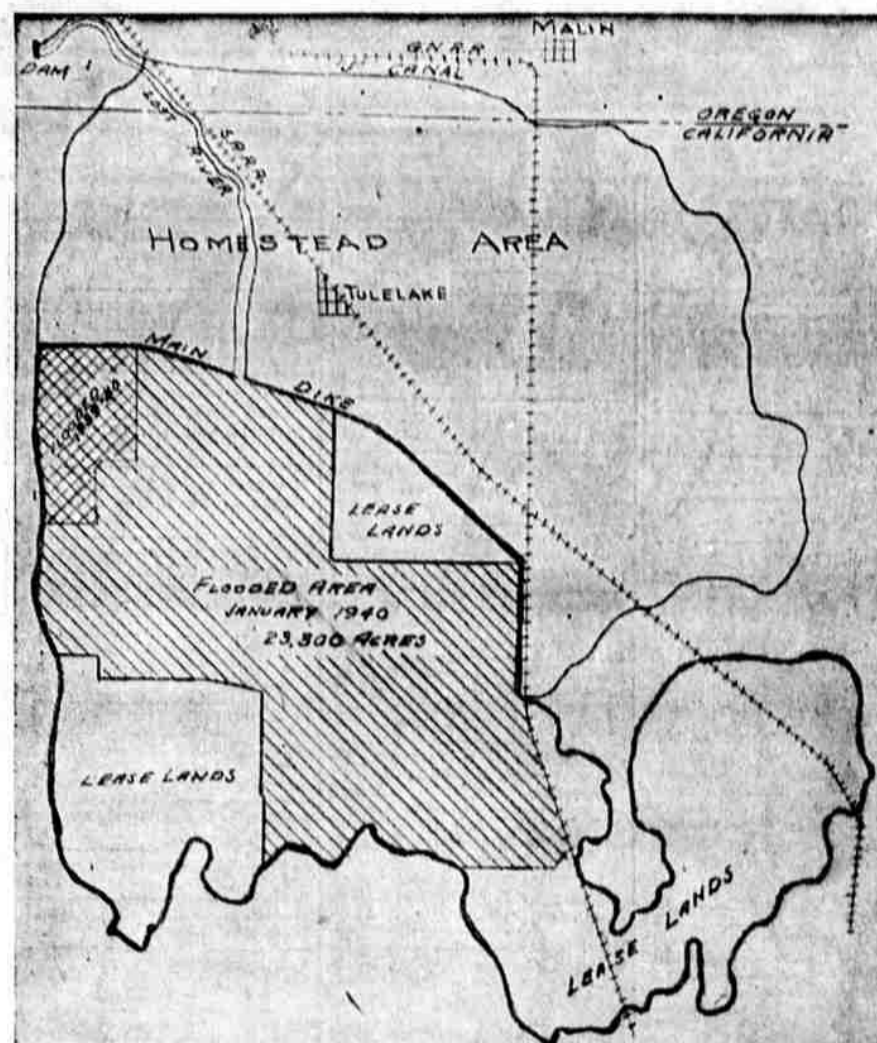
As originally planned, the portion set aside for holding the water in Tule lake consisted of 37,000 acres. Through a long dry cycle, the water was confined to 11,000 or 12,000 acres and the remaining land was leased for farming purposes. As wet years have come on, the water has broken dikes and spread, until today it covers about 25,000 acres and threatens to re-take more. There is even uneasiness over the safety of the permanently reclaimed land above the dike.

A solution to this problem has been evolved through civic effort and the investigations of competent government engineers.

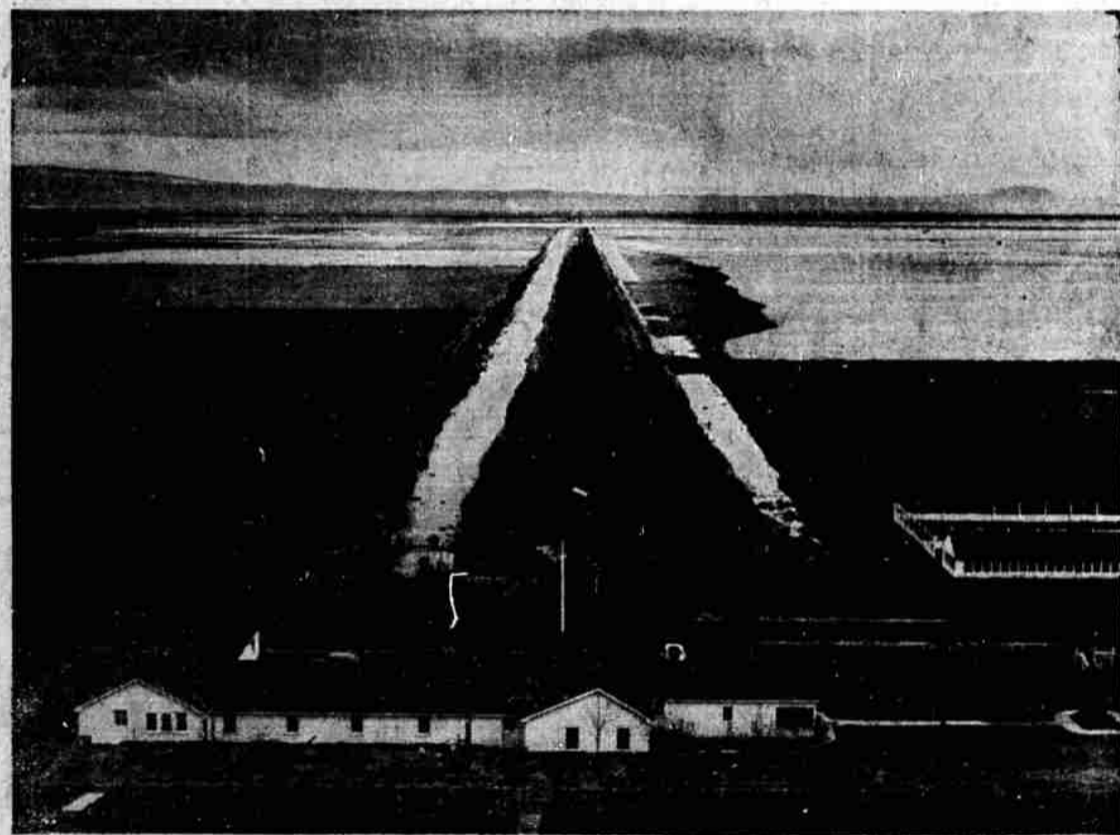
These pictures and maps show what has been happening in the sump area on Tule lake, and one shows a site of a major feature of the solution.



1932—This map shows the Tule lake basin as it was in 1932, when the flooded area was at its lowest point, and the other land within the sump area was at its maximum of cultivation. For years returns from this cultivated land have contributed substantially to the agricultural income of the Klamath basin, and fees from the leases have accrued to the credit of the Tule lake division of the Klamath project. As a wet cycle has come in recent years, sump lands have been re-taken by the water, with consequent losses in revenue both from farming and fees. The total of these potential losses is conservatively estimated in excess of \$750,000. What has happened to the land within the sump area is shown in the adjoining map.



1940—How the water has spread over the land is plainly illustrated in the shaded area on this map, which should be carefully compared with the map on its left. Since 1932, the year of conditions pictured in the first map, approximately 12,000 acres within the sump area at the upper left hand corner of the map, has gone into private hands. Note that in 1940 the newly flooded area (cross-hatched on the above map) includes this privately-owned land as well as some land that is currently leased. Thus the encroachment by the water is still going on, and today it is feared that another 2500 acres must soon be flooded within the sump area, while there is concern lest excessively wet years will endanger the privately owned homestead lands above the main dike.



DANGER POINT—This is a view of the main reclamation service dike, with the biological survey headquarters in the immediate foreground. To the right of the dike is newly flooded land, showing the water approaching the main structure which protects the homestead lands of Tule lake. Here is danger, for the water is open and subject to wind action, and the dike, although a rugged structure, is dry and new in this section to the job of holding off the pressure of the flood.



ATTACK AND DEFENSE—CCC boys from Tulelake camp strengthening a dike. The open water seen in the picture is highly dangerous to such protective structures, for there is nothing to break the wind and wave action.



ON ITS WAY—This picture shows water gushing through the sluice gates on the Lower Lost river diversion dam at the old stone bridge. This water is on its way to the Tule lake sump.



INVASION—River, stay 'way from my door. Flood waters are here encroaching upon a chicken yard at the headquarters of the Steele Land and Livestock company on the west side of Tule lake. The company moved out its permanent buildings to save them from the flood. The chicken yard was within a few feet of the house.



SOLUTION—Solution to the problem of excess water in the Tule lake basin is a proposed tunnel, through which water would be pumped to the thirsty Lower Klamath lake basin. Lower Klamath is separated from Tule lake by a narrow range of hills. This picture shows the hill and the test holes (indicated by arrows) which were made by government engineers laying out the plan for reclaiming the sump area and developing a great bird nesting area on the other side in Lower Klamath. Whether this solution can be made a reality depends upon action of congress at this session on a \$600,000 appropriation to start the work. The \$1,000,000 project is self-liquidating, to be paid off from revenues of the land reclaimed.