

Irrigation

Selah Canal

Deeds filed Tuesday with the county auditor mark the final step in the affairs of the Selah Valley canal. This important property is by them transferred from private corporation ownership to the control of the Selah Water Users association which has announced its intention of managing the canal for the best interests of the ranchers getting water from the canal who also form the association. The life history of the canal is interesting corresponding in many ways to that of most of the projects in the vicinity. The canal was originally owned by the Selah Development company which some time ago decided the upper end in the Selah Water company and the lower end to the Upper Valley Irrigation company, which proposed to use the fall of water in the canal on a site already chosen for the manufacture of power and light for the rancher in the valley.

The deeds filed Tuesday mark simply the retransfer of the interests which the two companies held to the Selah Development company and both the Selah Water company and the Selah Development company transfer their properties to the Selah Water Users association. There are four deeds in all and each is for \$1 and other valuable considerations. Davis and Northland handled the transfer.

The Water Users association has been in active control and operation of the canal since April. At a meeting of the present stockholders in the association held Monday afternoon at Selah for the purpose of electing a new board of trustees the following were chosen:

Jim Lancaster, George Biehn, C.L. Bradley, W.B. Armstrong, E.N. Longm. Mr. Lancaster will be the president and John W. Torney will act as secretary-treasurer. Allowners of land under the canal are now eligible to become

stockholders in the association, the stock being issued in proportion to the amount of water to which they are entitled from the ditch in accordance with the plan most generally in use in this section. There are about 400 ranchers who are land owners under the ditch and they control 11,000 acres of land. The majority of them are already signed for stock and it is expected that the rest will follow rapidly.

The life history of the canal is interesting corresponding in many ways to that of most of the projects in the vicinity.

It was originally promoted by individual ranchers and was soon taken over by a private corporation. It was involved in litigation several years and its reorganization pushing to completion and the placing of water on a large portion of the land now reached by the project was accomplished by Ira P. Englehart of this city.

Included in this land was what is known as the Selah plateau which was until that time to be entirely worthless.

The ditch as at present constructed starts in section 35 above Naches City, runs in a general southeasterly direction in the Selah valley and carries water in its extension to the brink of the Yakima river.

It waters land in the Selah valley and on the Selah ridge and with its main laterals is some 40 or 50 miles in length. The present owners propose to make extensive improvements in the property as funds accumulate.

The intake is some distance above that of the Yakima-Pasco power company which furnishes water to North Yakima. --
Yakima Republic, June 10, 1910.

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Irrigation

Tieton

Facts about Tieton project.

Built by government which will be reimbursed by private land owners.

Consists of three parts: Bumping lake dam, main ditch and distribution system.

Construction on canal began in 1907, ditch completed in 1909; main laterals on distribution system begun under private contract in 1909; finished in 1910.

For ditch 300,000 cubic yards of earth and rock were excavated and six tunnels driven before placing of concrete shapes began. One distribution system 18 miles of main laterals, 60 of sub laterals and 24 of cement pipe were laid.

Water will flow to 35,000 acres; 11,000 in first unit, 9,000 in second and 15,000 in third. Yakima Republic, June 10, 1910.

The Tieton project's compensation dam at Bumping lake returns to the Naches the strength sapped from the river's tributary; the canal conveys water from the Tieton dam down the canyon to the sage brush plateau and the spread distribution laterals spread the canal's offering over 35,000 acres.

The canal represents the most costly part of the project. This has its source at the headgate which lies in the forest reserve some 16 miles up Tieton canyon. Bulking across the river at this point is a concrete diversion dam 110 feet in length and three feet in height which breasts the stream. This is built low to withstand floods and has for its further protection a 60 foot relief spillway through

a rock wing.. The dam stays the current for the headgate's parting. Three cast iron gates, each four feet wide and five feet high serve as means of ingress for the water. The rising or lowering of these portals affects miles upon miles of laterals. The keeper of the gates is the patrolman whose house is but a few hundred feet away.

Assuming the responsibility now is Clarence Clements.

Excavation of the canal line was begun in the spring of 1907 and the driving of tunnels followed in July of that year.

Some of the work was done by District Engineer Joseph Jacobs. In 1909 John S. Conway assumed charge after his predecessor Charles H. Swigart had been promoted to the position of supervising engineer. The open canal excavation was finished in May, 1909. The laying of shapes undertaken unsuccessfully under contract by Theodore Weibinger was finished by the reclamation service in October, 1909.

During its stretch of 12 miles the ditch has a fall of 125 feet. Its first quarter mile below the headgate is a regular earth section 16 feet wide on the bottom with sides sloping outward to the top. Its depth when full is five feet.

At the end of this unlined section is a combined transition wasteway and sand box constructed of reinforced concrete. This is provided with an overflow so that if the water should get above the normal high level it can be discharged back into the river. At its base lies a false bottom with slots controlled by gates, the purpose of which is to trap sand and gravel before they can reach the concrete section.

Beyond this, but for tunnels and occasional wasteways, the Tieton canal is nothing else than a succession of shapes resting shoulder to shoulder in an array which may stand almost unbroken for centuries.

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It is the sum total in a seemingly endless addition of those separate figures were set down laboriously by many hands.

These shapes are made of concrete and molded in the form of horseshoes with a bar spanning the ends. Each has an inside diameter of eight feet, is two feet long and four inches thick; the cross bar is four inches square. Each weighs 1850 pounds. The shapes were manufactured at various level spots close to the river where water, sand and gravel were obtainable. Molds of sheet steel held in place by angle bars were used in the making.

Through each concrete structure ran a reinforcing skeleton of iron.

After the shapes were cast, dampened for 10 days and allowed to set or cure for 30 more, they were hauled up to the canal on tramways and transported up and down the ditch on tracks.

At points where they were needed travelers were utilized for lifting them from the cars.

Interstices between the set shapes were filled by a mortar made of sand and cement.

The desideratum in the laying and joining was to secure as smooth an inside ditch surface as possible. Twenty-five thousand of these shapes, laid end for end, form the lined portion of the canal.

For two and one half miles the ditch runs above ground.

Suddenly it defiles, for 100 feet, through the two short Steeple tunnels; again it flashes into the open, continues for two miles before it takes Trail creek tunnel, 3,200 foot length; then at intervals occur Columnar tunnel of 1,200 feet and lastly North Fork, 3,800 feet.

A short stride below the final tunnel and the Tieton canal is done. The sequence of laterals form a separate entity, the distribution system.

The land below the ditch falls into three units, the first lying between Naches river and the north fork of Cowiche creek; the second between the north and south forks of the creek and the third encompassing the southernmost remainder, the respective areas being 11,000 acres, 900 and 15,000.

Below North Fork tunnel the distribution system begins. The water which has been taken from the river 12 miles above is here turned into the north fork of Cowiche creek.

At intervals it is taken up again by main laterals. Four of these serve the first unit, three being relatively small and the fourth running for a distance of 12 miles along the ridge it has a wasteway into Cowiche canyon.

On the initial unit there are 18 miles of these laterals, 64 of sub laterals and 24 of cement pipe.

Mains were let by contract to D.H. Traphagen of Seattle; the subs being done by the government.

Sub laterals consist of earth ditches, pipe lines, flumes or rock drops according to the character of the ground demanded by soil and topography. In a final effort the distribution system is intended to make deliveries to each 40 acre tract. Flume and furrows used in further subdivision of the stream are being built by individual ranchers according to their own devices. At convenient points measuring boxes are installed. These are built according to certain designs devised to record the amount of water passing into sub laterals on individual tracts. But for the planting of these measuring boxes work

Tieton Irrigation

To celebrate the fulfillment of the dreams of pioneers the execution of the plans of engineers and the completion of the work of hundreds of laborers in the opening of the Tieton irrigation project which will convert 35,000 acres of raw sagebrush land into bearing orchard and more than double the area of the irrigated land tributary to North Yakima, residents of North Yakima and the Yakima valley and distinguished guests from various parts of the state including Judge Thomas Burke and Senator John L. Wilson of Seattle met in Sumach park shortly before noon today.

The speeches were preceded by a historical sketch of the work of the reclamation service by Attorney Ralph Williamson of the service.

The exercises began in the morning with an automobile ride out over the second unit of the Tieton project, the conveyances being 15 or 20 automobiles which carried the guests out over the raw land and back through the rich Nob Hill orchard section...

...Williamson said: "it is the plan of the government now to devote its attention to the storage of surplus water in the Yakima valleys, to irrigate 400,000 acres of land...."

Judge Thomas Burke said.....People of this generation by their educated intelligence have discovered the secret by which that land, that desert, is transformed and rendered productive soil to sustain a great population. The state of Washington in virtue of the change that is reached by the enterprise is destined in the near future to become a distributing center of a great trading empire, not alone this little portion of the Yakima valley which is served by the first

unit which is only one step in the great enterprise but
you will extend clear up to Kennewick.. Your trading empire
will extend north for many, many miles and it now rests
upon you as a duty to yourself and the state
to prepare and take care of that empire.

Judge Burke spoke on the necessity of increased means of urban
transportation and emphasized the necessity of many and fine
public highways in the way of country roads. "Yakima
Republic, June 19, 1910.

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Irrigation-Tieton

"As indication of the near approach of the actual putting into use of the canals of the Tieton project is contained in the announcement that the secretary of the interior, R.A. Ballinger has authorized the construction of three buildings to be located on the northeast quarter of section 34-14- 17 or about two miles east of Cowiche station for the use of the irrigation manager and resident employees.

The three proposed buildings will be one-story frame structures of the bungalow type and will be located in the approximate center of the irrigable lands of the Tieton project of the reclamation service.

The ground immediately adjacent to the site is now occupied by a construction camp known as Camp No. 4 and a house for the use of the canal patrol has already been erected on the same ground.

Bids for the buildings will be received in the office of Project Engineer Conway, Fourth avenue and B street, North Yakima Until May 20, 1910 at 2 p.m.--Yakima Republic, May 6, 1910.

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Indian Reservation

Irrigation

Treaty-Indian payment

The extension of irrigation and construction of drainage system on the Yakima Indian reservation are assured by the appropriation of \$285,000 by congress for this purpose.

The sum of \$250,000 is appropriated for the drainage system of which \$25,000 will be immediately available. The sum of \$15,000 is to extend the irrigation system, a special dispatch from Washington says.

Also appropriated was \$5,000 "For support and civilization of Yakima and other Indians in agency, including pay of employees."

"\$12,000 For support of Indians at Colville and Puyallup agencies and education and pay for employees, \$12,000."

For support and civilization of the Chinook, Nisqually and Puget Sound Indians including pay of employees \$1,000.

For support and civilization of the Makahs, including pay of employees \$2,000.

For the support of "pokes" for pay of blacksmith and carpenter \$1,000 each, \$2,000.

For purchase of agricultural implements and support and civilization of Joseph's band of Nez Perce Indians in Washington, \$1,000.

(All Washington Indians.)

"For the fourth of five installments to the Indians of the Colville reservation, Washington for the cession of land opened to settlement by the act of July 1, 1892, being a part of the full sum set aside and held in the treasury of the U.S. for payment for said land under terms of the act of June 21, 1906 ratifying the agreement ceding said land to the U.S. under date of May 9, 1891, \$300,000, to be expended for the benefit of the Indians in accordance with the provisions of said act

Indian Reservation

Treaty--Indian Payment

setting aside in the treasury the money in payment for the land, ceded; Provided that the secretary of the interior shall report to congress on the first Monday in December 1910 of the amount of reimbursable expenditures made under the provisions of the section seven, of the act of July 1, 1892 and 1906, to the extent the United States has been reimbursed in accordance with said provision of law.

To enable the secretary of the interior to purchase the improvements of Young Dooty, a Makah Indian on Waadach Island in township 53, north range 15 west, first principal meridian, Wash. \$1,200 or so much thereof as may be necessary--the committee on support and civilization of the Makahs, including pay of

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Indians

Wapato project

In a nutshell the Indians of the Yakima reservation want to have the Wapato irrigation ditch completed but they are particular as to how it shall be done.

Indian allottees with 80 acres of land do not wish to be compelled to sell 60 acres of their land to get water on the other 20.

They want to have the ditch constructed under the supervision of the Indian bureau of the land office and not by the reclamation bureau that has charge of building the great reservoirs and constructing the irrigation canals. They insist that no part of an allotment watered by the ditch shall be taken to pay therefrom but that the ditch shall be paid for out of the tribal money. If there is not sufficient tribal money then cost of the ditch shall be paid for out of the rentals or products of the allotments watered. The Indians further stated that the government has tribal lands and timber in trust for them and that when sold the money should be added to the tribal funds. They do not want to use any part of the tribal funds to build roads on the reservation.

Foregoing are the views of those present at a conference at Wapato Thursday afternoon at which were present a dozen of the leading Indians, a strong delegation from Tonawanda, Wapato and North Yakima commercial bodies and others prominent in business through the region embraced in the country to be benefitted nearly 50 all told.

The above are also the principal features of a petition to the honorable commissioner of Indian affairs which has already been signed by Rev. Stwire C. Waters, head chief, Louis Mann, corresponding secretary; Charles Wesley, Watson Whomer

and 27 other leading Indians .

At the "apato conference on Thursday Leonard Albott president of the Hoppenish Commercial club presided. Speeches were made by Chief Waters, Louis Mann, Alex Teo, William Charlie and Douglas Holt, while lucid explanation as to their desires were made by L.V. McWhorter, an adopted and trusted friend. --Yakima Herald, April 26, 1911.

SUMMARY OF MAIN POINTS OF ROZA PROJECT CONTRACTS

This contract between the U. S. government and the water users on on the Roza Irrigation district states that before any individual can receive water, he must agree to pay his proper share of the storage and construction charges. It is estimated that these costs will average \$265 per acre which, paid out over a period of 40 years without interest, will equal \$6 to \$7 per acre per year. In addition there will be operation and maintenance charges which will bring the total yearly average cost to between \$10 and \$12 an acre.

Construction charges will not be assessed against veteran homestead ^{veterans} units for the next few years, but/will be required to pay O. and M. charges which will average about \$4 an acre.