

# Central Oregon Farm Fair and Trade Show

February 2-3, 2022  
North Unit Irrigation District

# Farm Fair 2021 Topics

Lake Billy Chinook Concept/Progress

Watershed Protection and Flood Prevention Program PL-566

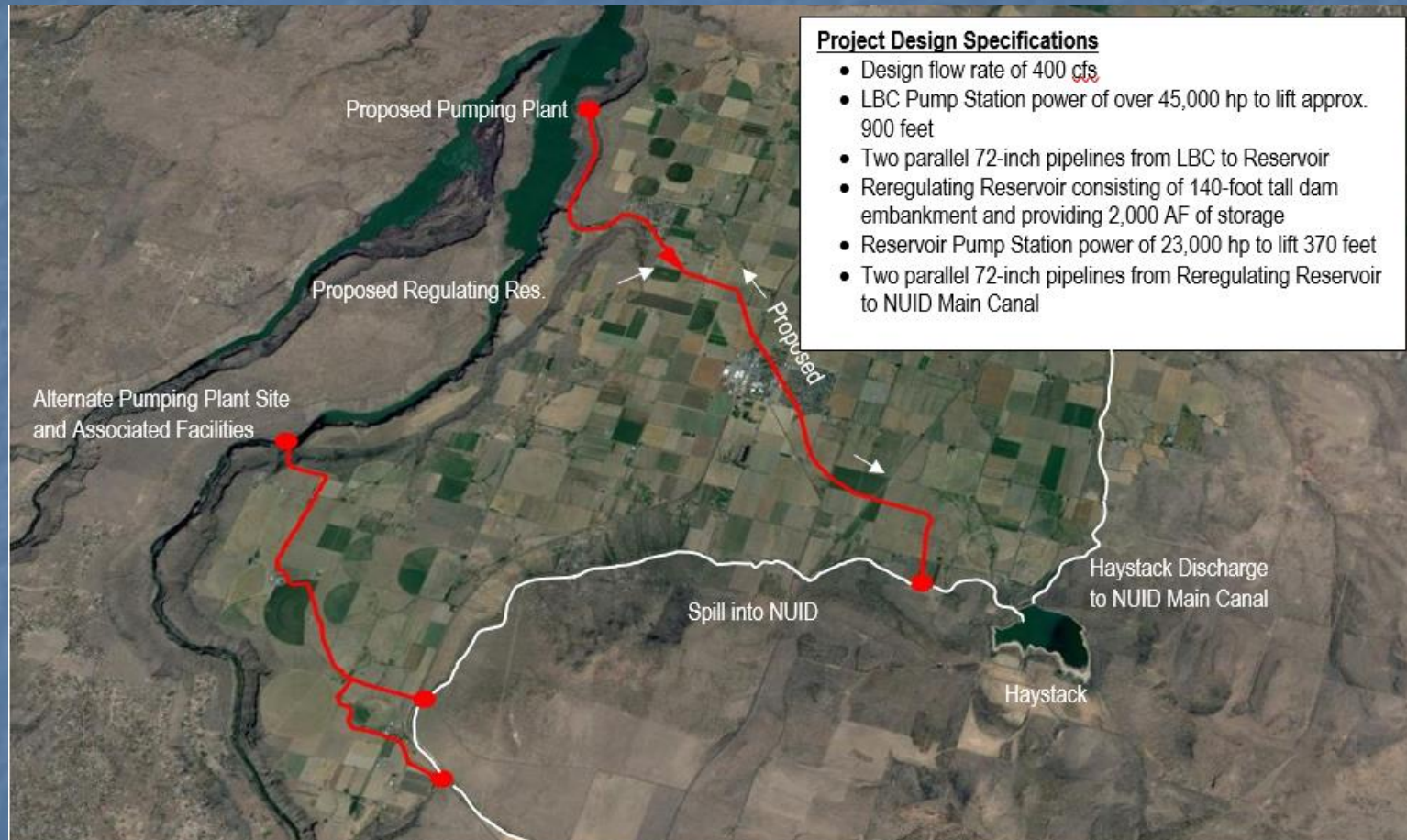
Water Supply Investigations

2021 Water Year Recap

2022 Water Year

NUID Organizational Changes

# Lake Billy Chinook Proposed Pumping Plant





# Watershed Protection and Flood Prevention Program

NUID continues to work on projects related to funding through the National Resources Conservation Service's Watershed Protection and Flood Prevention Program (also referred to as P.L. 83-566). The Deschutes basin has been able to secure approx. \$110+ million for piping projects in Central Oregon. To qualify for the funding a Watershed Plan must be completed. NUID is currently working on the plan with Farmers Conservation Alliance - completion of the Watershed Plan anticipated in summer of 2022. NUID is eligible for \$25 million in funding once the plan is complete and approved. We anticipate beginning pipeline construction of Laterals 31, 32, 34, and 43 in 2023.

# NUID Water Supply

- NUID investigated the potential for new storage reservoirs including sites northwest of Madras and near Haystack Reservoir.
- NUID also considered the expansion of Haystack Reservoir both in capacity at its current location and the potential to expand the reservoir to the southeast.
- “Bulges” in the irrigation delivery system to serve as temporary storage facilities to capture “event” water resulting from weather or operational events.
- NUID investigated the potential of installing well fields or groundwater pumping stations next to or near the NUID delivery system as a supplemental water supply.
- NUID has also investigated, and continues to investigate, Lake Billy Chinook as a potential water source.
- City of Bend’s recycled or reclaimed water from their reclamation facility near the NUID main canal east of Bend.

# Water Supply (con't)

- NUID has completed a district-wide System Improvement Plan that identifies areas where improvements can be made through piping and other efficiency upgrades.
- Basin inter-district transfers and water marketing whereby water becomes available via urbanized or fallowed lands.
- NUID actively participates in State and Federal lobbying.
- NUID's pursuit of conservation projects as noted above. Many small-scale piping and lining projects completed through various forms of private, state and federal funding.
- Basin Partnerships are the short and long-term key.
- NUID is working with basin partners to obtain water resulting from conservation projects including piping and advances in on-farm efficiencies.



# 2021 Water Year Recap

# 2021 Water Year Recap

- In 2021 Wickiup Reservoir started the season April 9 at 114,800 af compared to 140,982 in 2020. The 2021 season ending reservoir level was 3,160 af compared to 2,757 af in 2020.
- NUID Board set 1.0 af Deschutes Water allotment (lowest on record) and .50 af Crooked River Water allotment.
- NUID called on its Prineville stored water beginning in mid-April and finished pumping all of NUID's 10,000 af on July 16, 2021. Total water pumped for 2021 Irrigations Season was 10,143 af.
- Due to extreme drought conditions, an allotment reduction of .10 was made on 6/30/21. On 7/7/21 an additional .10 was reduced + an order cap was instituted.
- On August 20, the district ran out of water – all stored water was depleted, and no live flow existed for junior users.
- NUID came back on Oct. 6 (+.10 Allotment) and ran until Oct. 20.



North Unit Irrigation District								
YEARLY WATER USAGE TOTALS								
10 Year Period								
YEAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	TOTAL
2012	3,487.10	24,113.12	17,952.84	24,610.30	24,301.60	16,088.72	8,653.21	119,206.89
2013	14,030.79	25,128.88	22,730.65	25,625.15	20,064.59	11,490.49	1,190.13	120,260.68
2014	4,641.27	24,115.94	24,328.54	21,500.95	19,939.51	14,956.48	7,925.61	117,408.30
2015	13,909.75	19,467.23	25,015.17	19,803.70	18,459.97	12,850.37	3,022.26	112,528.45
2016	13,854.82	15,371.85	19,588.78	18,670.07	22,543.61	13,685.63	3,721.65	107,436.41
2017	3,487.13	22,841.21	20,443.08	24,081.64	23,378.43	12,571.96	6,495.94	113,299.39
2018	10,165.35	23,153.78	20,996.81	21,449.73	18,997.25	13,817.37	4,111.85	112,692.14
2019		13,806.00	16,667.00	14,388.00	14,262.00	9,799.00	3,163.00	72,085.00
2020	11,012.08	12,260.65	8,750.12	12,460.03	10,502.16	7,588.92	4,999.16	67,573.12
2021	9,003.50	12,583.92	11,068.43	4,392.36	3,107.05	-	6,822.64	46,977.90
Average	6,628.97	19,900.02	22,833.96	23,094.01	17,632.28	13,708.66	7,194.61	110,854.41
10yr ave	9,287.98	19,284.26	18,754.14	18,698.19	17,555.62	11,284.89	5,010.55	98,946.83
Minimum	-	6,101.91	8,750.12	4,392.36	3,107.05	-	1,190.13	46,977.90
Maximum	16,877.20	33,032.10	42,397.50	41,203.60	24,301.60	23,741.60	16,460.70	167,577.10

## NUID CROP DATA

<b>CROPS</b>	<b>2019 Acres</b>	<b>2020 Acres</b>	<b>2021 Acres</b>
Cereals	949	914	1,652
Forage	24,740	22,814	18,256
Misc. Field Crops	1,337	918	856
Vegetables	661	643	608
Nursery	367	296	317
Seeds	17,491	16,924	15,976
Hemp	1,901	429	113
Non Ag/Not Harvst	3,658	2,389	1,877
Fallow	7,783	13,560	19,226
<b>Total</b>	<b>58,887</b>	<b>58,887</b>	<b>58,887</b>

# Wickiup Reservoir Comparison

Month	%Snow	Wickiup	Allotment	Date Lowest	Wickiup Lowest
April 8, 2014	60%	200,000	3.00/2.00	Sept. 25	48,401
April 14, 2015	13%	199,658	2.25/1.25	Oct. 3	16,419
April 12, 2016	76%	173,336	2.25/1.25	Sept. 27	19,614
April 11, 2017	128%	172,733	3.00/2.00	Sept. 14	66,379
April 10, 2018	63%	197,081	2.25/1.25	Oct. 11	2,682
April 9, 2019	106%	138,080	1.50/0.75	Sept. 18	16,419
April 6, 2020	73%	140,482	1.25/0.50	Sept. 13	2,585
April 9, 2021	18%	115,134	1.00/0.50	Aug. 31	2,882



# Water Year Allotment Comparison

Month	%Snow	Wickiup	Allotment		
April 8, 2014	60%	200,000	3.00/2.00		
April 14, 2015	13%	199,658	2.25/1.25		
April 12, 2016	76%	173,336	2.25/1.25		
April 11, 2017	128%	172,733	3.00/2.00		
April 10, 2018	63%	197,081	2.25/1.25		
April 9, 2019	106%	138,080	1.50/0.75		
April 6, 2020	73%	140,482	1.25/0.50		
April 9, 2021	18%	115,134	1.00/0.50		
				DR	CR
1991		177,195	1.60/.10	+.25	+25
1992		163,859	1.20/.10	+.10	+.10
1994		200,223	2.00/.50	-.15/-.15	-.04/-.04
1995		158,937	1.40/.10	+.20/+.15	

# NUID Organizational Change

May 1, 2021 Josh Bailey began training as NUID General Manager.

Mike Britton semi-retires April 30, 2022. Will return in May on a part-time basis to work on special projects.

Sue Light (Office staff) retires August 2022

1/1/22 Evan Thomas elected to replace Richard Macy and will serve a 3 year term on NUID Board of Directors.

Sincere appreciation to Richard Macy for his service to the district having served on the NUID board since September 1985.

Questions ?