Yuba County Drainage / Public Works

Yuba County – Department of Public Works provides drainage services within urbanized areas of the County. Public Works performs the following activities:

- 1. Prepare Grant Applications for Capital Improvements
- 2. Capital Improvement Design
- 3. Development Review
- 4. Floodplain Management (Federal NFIP and CRS)
- 5. Drainage Maintenance Engineering
- 6. Maintenance and Operations
- 7. Stormwater Quality (CA Phase II MS4 General Permit)

Yuba County Drainage / Budget

Yuba County – Drainage Ditch Budget FY 2022-23:

Street Sweeping	\$	60,000
Storm Drain Cleaning	\$	45,000
Olivehurst Detention Basin O&M:	\$	20,000
SWPPP Permit Fee:	\$	15,500
Drainage Ditch Maintenance:	\$	151,039
Culvert Cleaning & Replacement:	\$	228,300
Drainage-related CDSA salary/benefits:	\$	105,416//
Drainage Maintenance Engineering:	\$	178,660
Floodplain Administration & CRS:	\$	125,328
Development Review:	\$	195,891
Misc. Drainage Improvement Projects:	\$1	,087,919
Code Enforcement along waterways: /	/ \$ ·	250,000

Grand Total: \$2,465,063

Yuba County Drainage / Budget

<u>Yuba County – Revenues for FY 2022-23:</u>

Yuba Water Agency drainage funding: \$1,125,133*
Budget Transfer from Code Enforcement: \$ 250,000
Grants for Capital Improvements: \$1,087,919

Grand Total: \$2,463,052

 YWA funds a portion of Public Works salaries for Director, Assistant Director, Construction Manager, and staff,

Note: The County does not receive any tax dollars for drainage maintenance, nor are there any Special Districts that pay for drainage maintenance in Linda of Olivehurst. There are special districts in Plumas Lake that have assessments for drainage maintenance. Reclamation District 784 receives funding for maintaining their facilities.

Yuba County Drainage / Improvements

Yuba County prepared the South Yuba Drainage Master Plan in 2012, and has completed numerous improvements to the Linda and Olivehurst drainage systems over the years. These improvements include:

- 1. Olivehurst Interceptor
- 2. Orchard Detention Basin
- 3. North McGowan Pond Detention Basin
- 4. South McGowan Pond Detention Basin
- 5. South Olivehurst Detention Basin
- 6. Clark Lateral
- 7. Lindhurst Drain
- 8. 10th Street Pump Station

Note: the County collects drainage Impact fees for drainage improvements.



Yuba County Drainage / Recent Capital Projects

Yuba County – Department of Public Works has completed the following capital improvement projects, all of which include storm drains and drainage improvements:

- 1. Olivehurst Avenue Complete Streets Project
- 2. Powerline Road Complete Streets Project
- 3. Seventh Avenue Project
- 4. Eleventh Avenue Project
- 5. North Beale Road Phase 1
- 6. North Beale Road Phase 2
- 7. Wiget Avenue



Yuba County Drainage / Current Capital Projects

Yuba County – Department of Public Works has obtained funding for and is currently constructing the following capital improvement projects that include new drainage systems:

1. McGowan Parkway between SR70 and SR65

2. Lindhurst Avenue / Feather River Boulevard Drainage

Project



Yuba County Drainage / Upcoming Capital Projects

Yuba County – Department of Public Works has obtained funding for and will soon (within the next two years) begin construction on the following capital improvement projects that include new drainage systems:

- 1. Cedar Lane
- 2. Alicia Avenue
- 3. Garden Avenue
- 4. Feather River Boulevard
- 5. West Linda Detention Basin
- 6. Eastside Interceptor



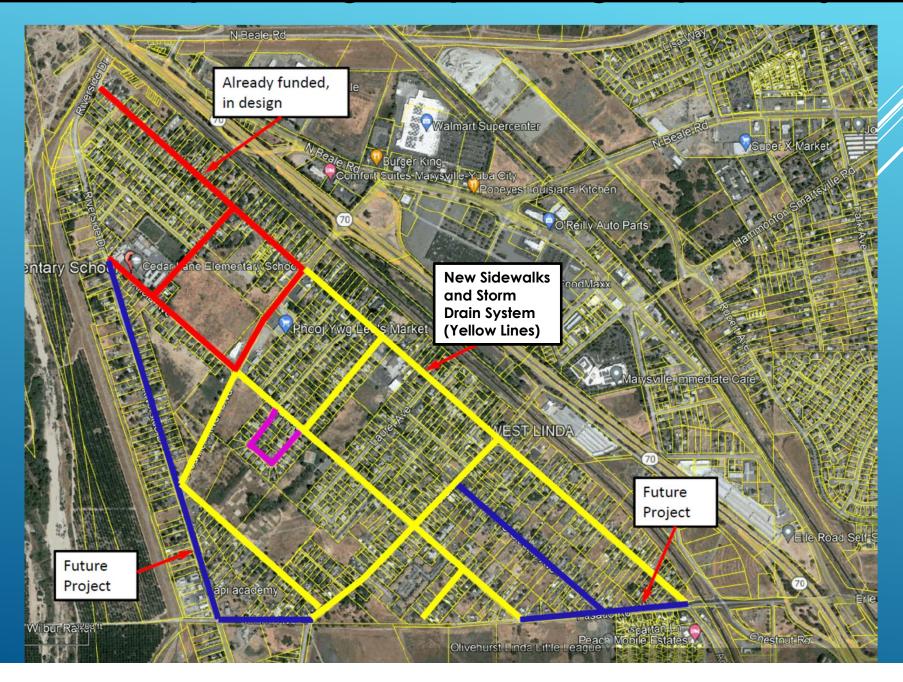
Yuba County Drainage / Upcoming Capital Projects

Yuba County – Department of Public Works has obtained funding for and is beginning the design of the largest capital improvement project in County history. The West Linda Comprehensive Project includes the construction of a first-ever storm drain system along the following roadways:

- 1. Arboga Road
- 2. Alicia Avenue
- 3. Cottonwood Avenue
- 4. Feather River Boulevard
- 5. Grand Avenue
- 6. Jay Avenue
- 7. Vine Avenue



Yuba County Drainage / Upcoming Capital Projects



Yuba County Drainage / Priority Capital Projects

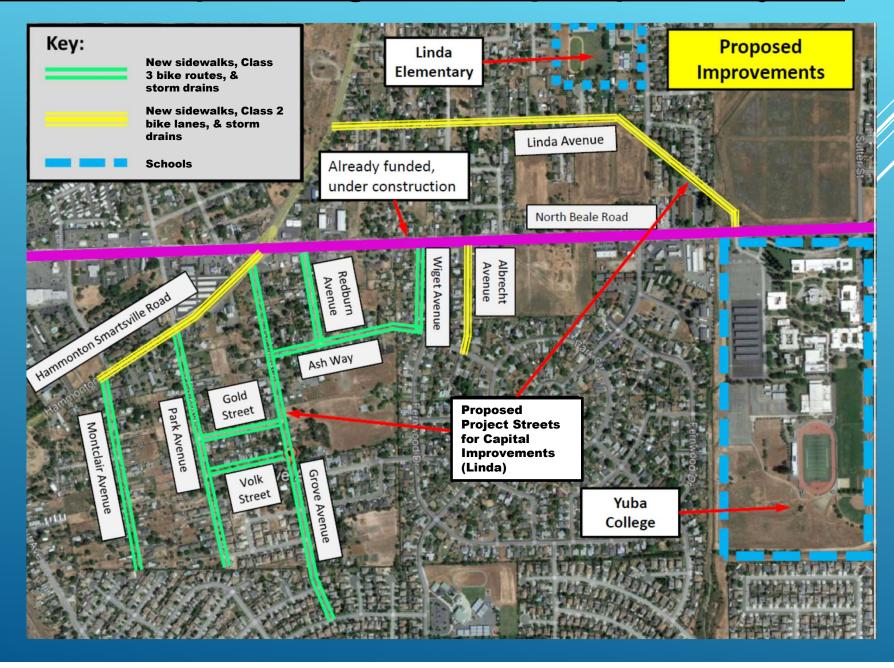
Yuba County – Department of Public Works continues to pursue funding for additional drainage capital improvement projects in Olivehurst and Linda. In 2022, the County submitted grant applications for three major capital improvement projects. The County received funding for one of the three projects, the West Linda Comprehensive Project.

The County missed obtaining \$22 million in State grant funding by one point in the competitive grant program for a major project in Olivehurst, and missed winning \$21 million in funding for a major project in Linda by four points. It is anticipated that the County will be successful in obtaining grant funding for at least one of these two projects during the next grant funding cycle (2024).

Yuba County Drainage / Priority Capital Projects



Yuba County Drainage / Priority Capital Projects



Yuba County Drainage / Drainage Studies

Yuba County – Department of Public Works is in the final stages of completing an updated drainage study that includes the following:

- An inventory of the locations and types of existing drainage facilities in the project area, including Reclamation District 784 facilities;
- Development of a full hydrologic and hydraulics study using the latest data for Linda and Olivehurst. This H&H study will be the basis for developing a drainage capital improvement program to retrofit the drainage system in the project area (PW is currently pursuing grant funding);
- Develop a GIS layer showing the existing drainage system (locations, sizes); and
- Examine transportation corridors, transportation system vulnerabilities, and drainage infrastructure vulnerabilities/deficiencies.

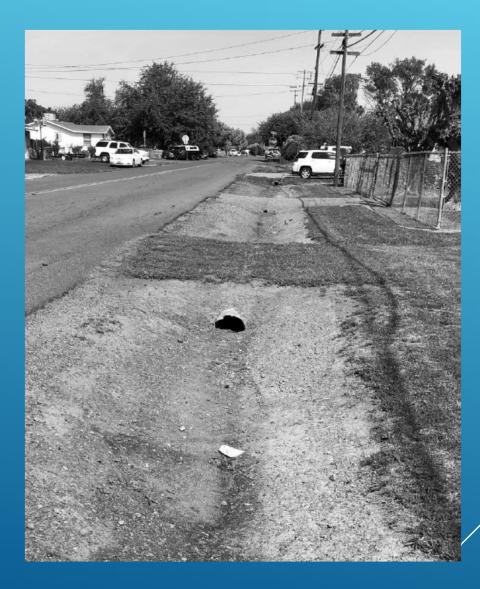
The Yuba County drainage system has four major storm drain systems: the Linda drain, Olivehurst Drain, Clark Lateral, and Olivehurst Interceptor (which discharges into Reeds Creek). The Yuba County drainage system faces several challenges, including:

- 1. Flat terrain
- 2. Areas of ponding due to local depressions in the terrain that do not have adequate drainage
- 3. Insufficient capacity at the 10th Street Pump Station during 100-year event
- 4. Frequent system clogging due to debris washed in by storms
- 5. The sheer size of the overall drainage system, with over 1,000 miles of drainage ditches, 11 detention basins, and several thousand County-owned culverts (actual number of County culverts is not known).

An additional challenge is the backwater effect from the Bear River. When the Feather River and Bear River have high water surface elevations, the canals draining Olivehurst are unable to drain water out of the urban area. The County has constructed multiple detention basis to address this concern; the primary basin is the South Olivehurst Detention Basin.













Yuba County Drainage / Culvert Replacement

Should the County elect to replace existing, private culverts that were installed incorrectly, are undersized, or are damaged, the cost would be substantial. Should every private culvert in Olivehurst be replaced and the ditches re-graded, the cost could easily be over \$2 million. The following table is an example of how much such a project might cost.

Item Description	Units	Quantity	Unit Price	Amount
Remove Existing Culvert	LF	37,280	\$15	\$559,200
Install 12" Culvert	LF	37,280	\$30	\$1,118,400
Grade Ditch	LF	91,145	\$2	\$182,290
Mobilization	LS	1	\$50,000	\$50,000
Construction Area Signs	LS	1	\$4,000	\$4,000
Traffic Control System	LS	1	\$10,000	\$10,000
Preparation of SWPPP	LS	1	\$1,500	\$1,500
Implementation of SWPPP	LS	1	\$5,000	\$5,000
		Subtotal Construction Costs:		\$1,930,390

Yuba County Drainage / Public Outreach

Yuba County is initiating a public outreach effort as follows:

- 1. Homeowners are responsible for properly maintaining the culverts under their driveways.
- 2. No work may be done on or in the County's roadside ditches without an encroachment permit.
 - a) Homeowners need to ensure that their culverts are in good structural shape. If not, they need to apply for an encroachment permit to replace the culvert.
 - b) Culverts under 12" in diameter or culverts not installed at the flowline of the ditch need to be replaced. Again, the homeowner should apply for an encroachment permit to replace their culvert(s).
 - c) Homeowners also need to routinely monitor their culverts to ensure that they are clean (i.e. not plugged with dirt or debris). It is the homeowner's responsibility to keep their culverts clean.

Questions

