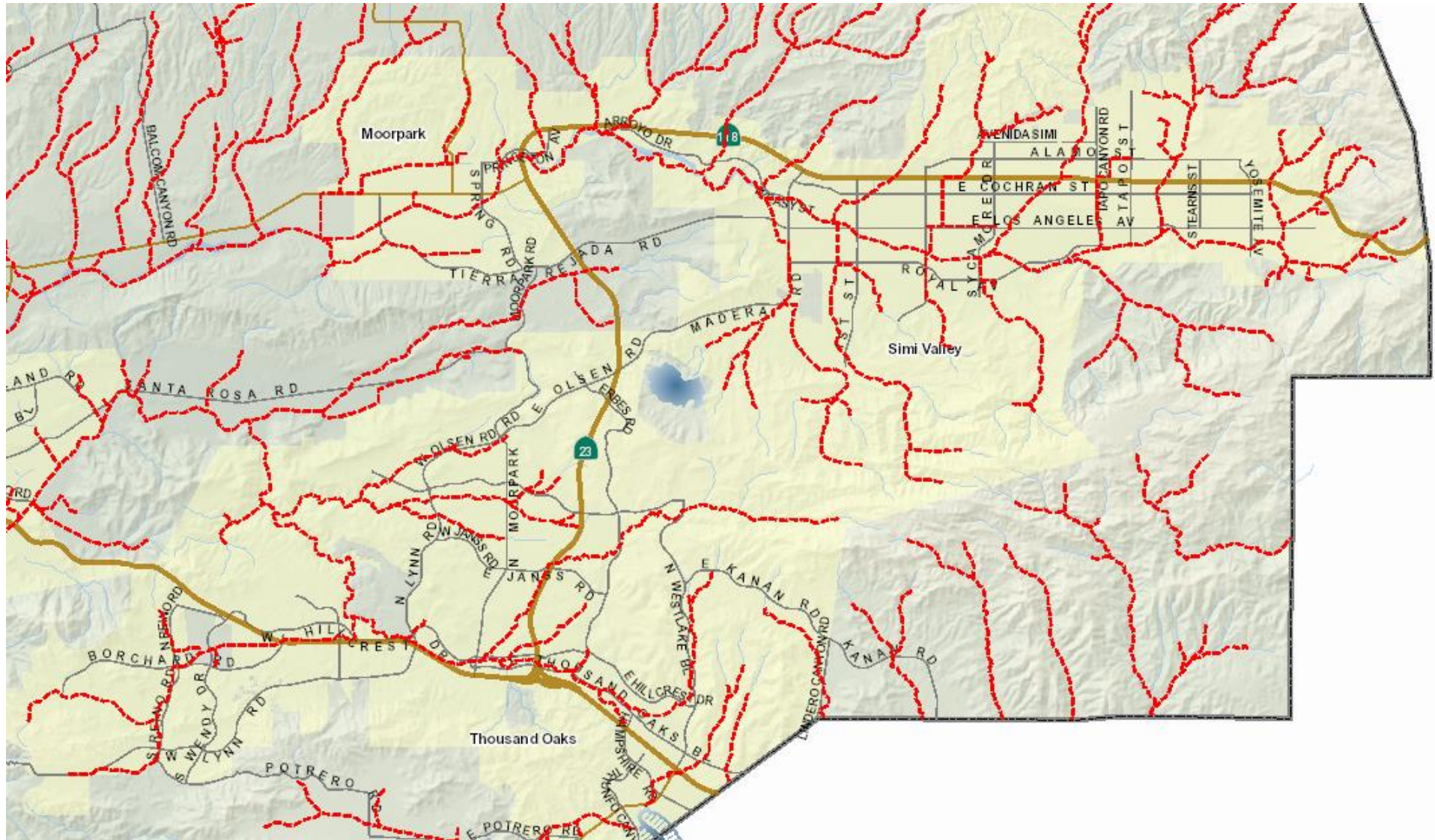


Medea Creek Hydraulics, Maintenance & Permits

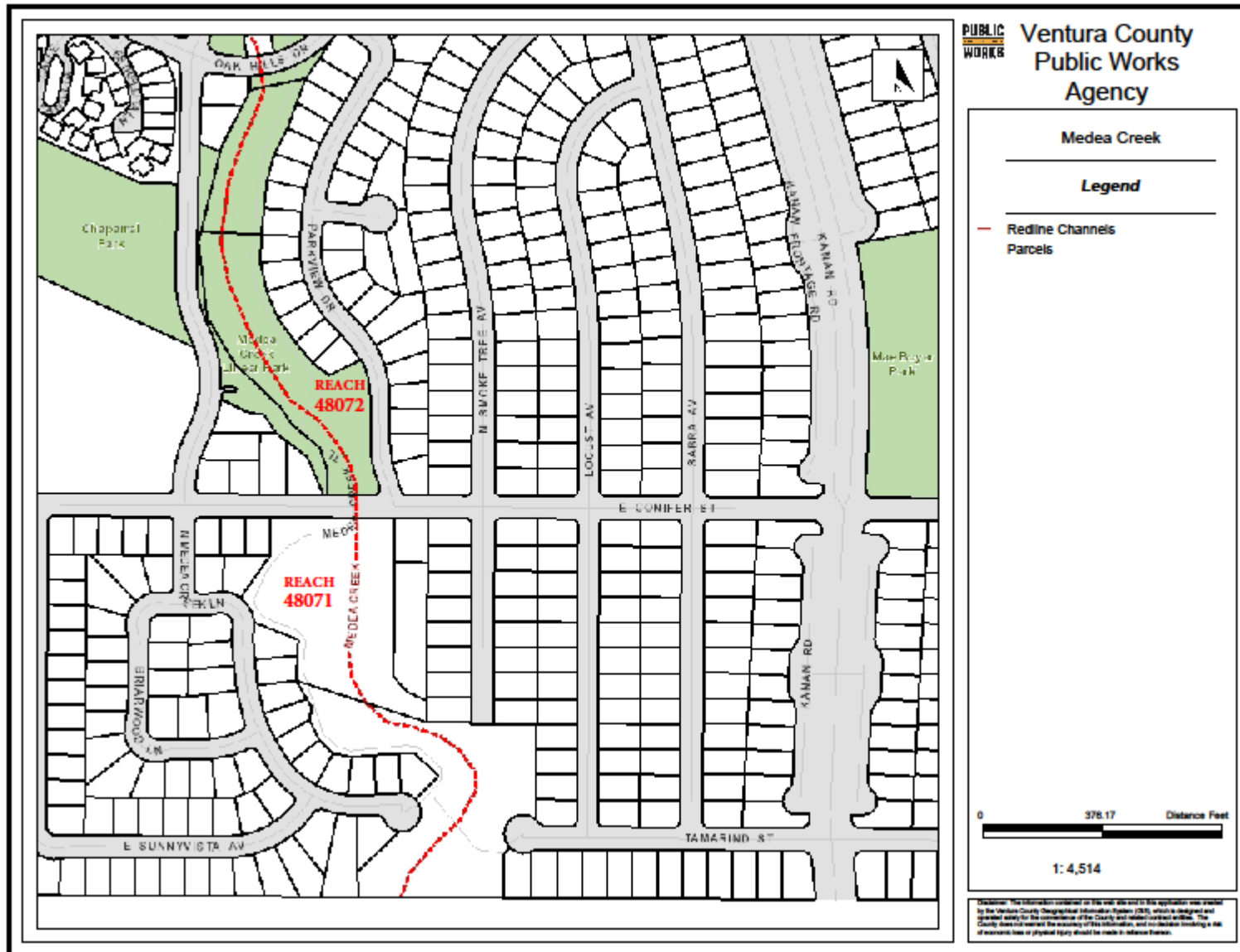
Watershed Protection District Overview

- Over 900 miles of redline channel
- Every reach numbered and identified
- Maintenance of facilities











Flood Warning System NRCS HEC-RAS

Ventura County Flood Warning System

- ▶ Over 120 Rain Gauges
- ▶ Over 40 Stream Gauges
- ▶ Integrated with Santa Barbara and LA Counties
- ▶ Integrated with NWS
- ▶ Storm modeling and predictions

Ventura County Flood Warning System

- ▶ Significant Rain Events
- ▶ August 2023 – 23 Freeway Area
- ▶ December 2023 – Pt Hueneme Area
- ▶ 2023 Winter 90 inches of Rain
- ▶ 2024 Winter 60 inches of Rain

HEC-RAS Modeling:

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
reach01	1298.7	50 yr	4480.00	837.83	852.76	846.47	853.97	0.000235	8.86	508.92	122.02	0.41
reach01	1298.7	100 yr	5380.00	837.83	854.83	847.50	856.16	0.000215	9.28	583.53	137.29	0.41
reach01	1298		Culvert									
reach01	1151.3	50 yr	4480.00	836.42	842.89	842.89	845.68	0.005992	13.40	334.43	150.17	1.00
reach01	1151.3	100 yr	5380.00	836.42	843.62	843.62	846.76	0.005739	14.23	378.11	159.94	1.00
reach01	1085.95*	50 yr	4480.00	833.58	840.61	840.61	842.98	0.003506	13.53	376.88	81.10	0.96
reach01	1085.95*	100 yr	5380.00	833.58	841.56	841.56	843.86	0.002882	13.51	467.32	117.13	0.89
reach01	1020.6	50 yr	4480.00	830.67	839.01	839.01	841.59	0.004310	12.67	350.15	68.21	0.84
reach01	1020.6	100 yr	5380.00	830.67	839.95	839.95	842.56	0.003708	12.77	420.59	89.38	0.80
reach01	970.5	50 yr	4480.00	830.69	838.21	838.21	840.05	0.003645	10.35	422.22	117.41	0.75
reach01	970.5	100 yr	5380.00	830.69	838.76	838.76	840.74	0.003475	10.71	487.94	124.44	0.74
reach01	855.3	50 yr	4480.00	828.85	838.41		839.15	0.000975	5.99	659.12	120.40	0.37
reach01	855.3	100 yr	5380.00	828.85	839.38		840.14	0.000854	6.04	779.58	128.05	0.35
reach01	805.8	50 yr	4480.00	829.57	838.60		839.02	0.000497	4.32	879.25	158.18	0.26
reach01	805.8	100 yr	5380.00	829.57	839.58		840.01	0.000425	4.31	1036.96	162.78	0.25
reach01	705	50 yr	4480.00	828.51	838.66		838.93	0.000279	4.06	1091.49	174.27	0.24

Maintenance

- Flood Control
- Weed Abatement
- Landscape & Trail
- Detailed and Focused

















Permit Structure

Permit Structure

- 5 Year Permit
- Watershed Protection Determines maintenance activities
- CDFW Provides Requirements for work

Permit Structure

- Full Biologist review before/ after all work
- Full Crew Training
- Observance for all wildlife, birds and aquatic species
- No spraying of herbicides

Questions