Draft Waste Discharge Requirements Discharges Related to Timber Harvesting and Associated Activities Conducted by Humboldt Redwood Company, LLC in the Upper Elk River Watershed (Order No. R1-2016-0004)

> Item No. 2 November 18, 2015

> > Jim Burke



Presentation Outline

Status and Timelines

Discuss Draft Waste Discharge
 Requirements (WDRs)

Questions and Public Comments



Anticipated Timeline:

November 18, 2015 – Workshop on Draft WDRs

By December 4, 2015 - Public comment for Draft WDRs and Mitigated Negative Declaration

March 10, 2016 – Adoption Hearing

Water Boards

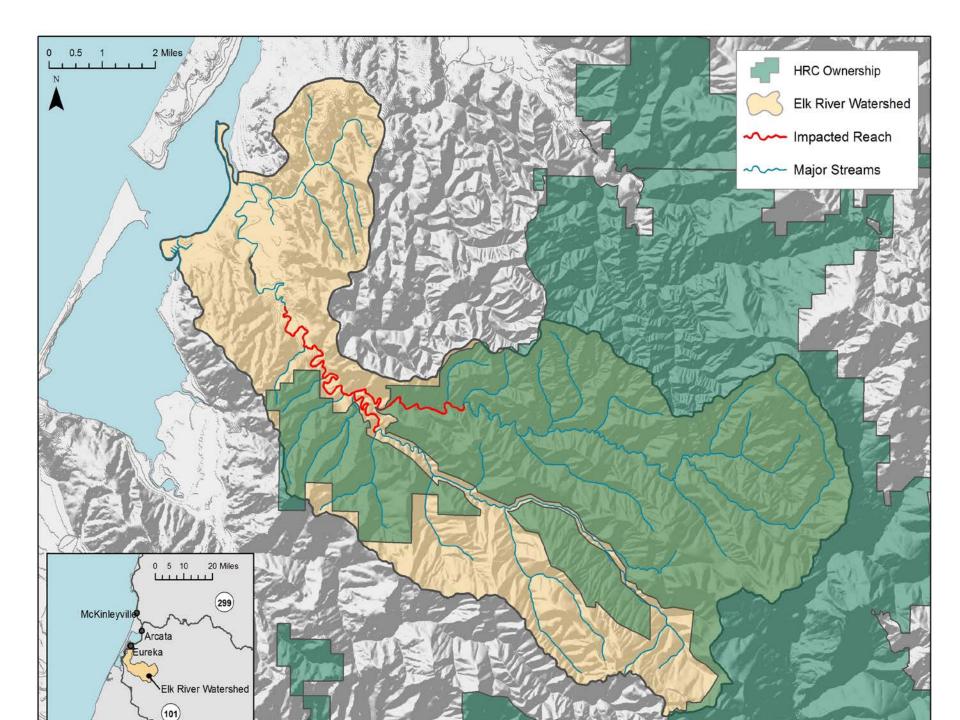
New WDRs

- TMDL nearing completion
- Ongoing impairment and lack of assimilative capacity in Elk River
- Zero load allocation



- Applies to largest landowner (HRC) in the Elk River watershed
- HRC owns approximately 22,200 acres in Elk River:
 - ➤ ~66% Elk River
 - ~79% of the upper Elk River





- Relies on Tetra Tech Report (2015)
- Addresses challenges unique to Elk River:
 - Significant impairments
 - Harm to residents
 - Responsible timber companies

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Report of Waste Discharge

April 28, 2015 - First Draft

- September 22, 2015 Completed Draft
- October 21, 2015 Letter acknowledging complete ROWD
- Some significant issues remain

Water Boards

- Consolidates HRC's WDRs and Cleanup and Abatement Orders (CAOs)
- Largely based on:
 - HCP prescriptions
 - HRC's management practices
 - FPRs

Similar to Bear and Jordan WDRs

- Control existing sediment source
- Prevent creation of new sources
- Stream restoration
- Monitoring and reporting



- Harvest limits
- Temporary harvest prohibition in high risk subwatersheds
- Enhanced riparian management zones
- BMPs to prevent new sediment sources
- Inventory and treat existing sediment sources
- Feasibility study to control in-stream sediment sources
- Monitoring and reporting program
- 5-year check-in with Board

Harvest Limits

- Harvest rates associated with sediment production:
 - Increased peak flows
 - Loss of root strength increases landslides
 - Overall increased ground disturbance



Harvest Limits

- Silviculture
 - No clearcutting
 - Mostly single tree and group selection
 - Limited variable retention and rehabilitation



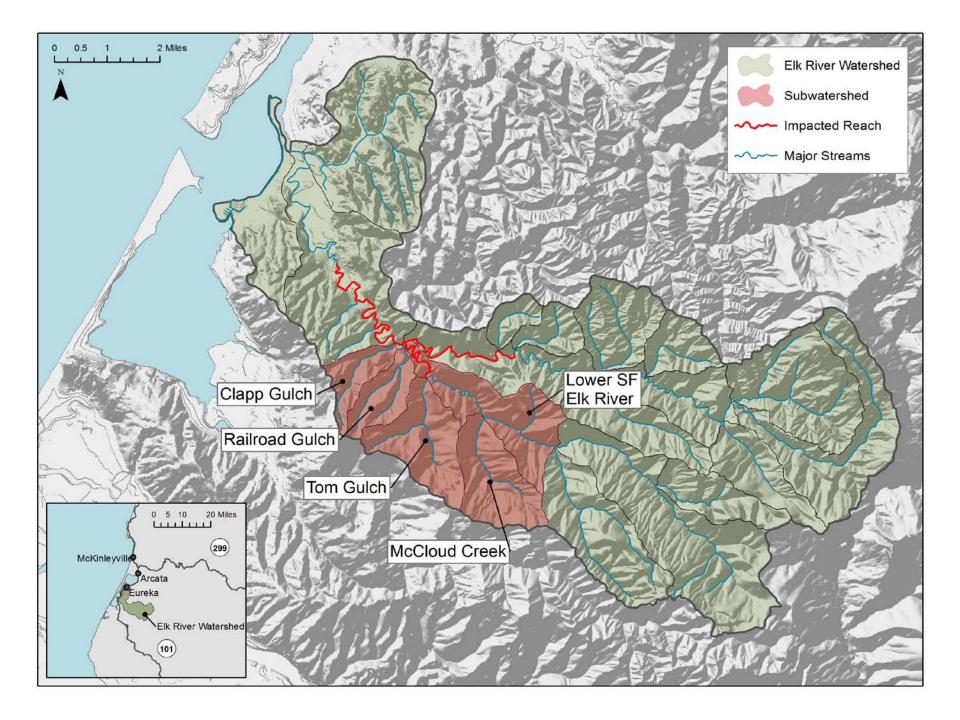
Harvest Limits

- HRC's proposed harvest
 - ROWD included 20-year harvest projection
 - Subwatershed harvest acreage in 5-year
 - Modeled overlapping crown canopy
 - Watershed-wide less than 1.5% equivalent clearcut acres/year
- Order specifies average annual subwatershed harvest not exceed 2% equivalent clearcut acres for any 10-year time period

Temporary Harvest Prohibition

- Subwatershed risk:
 - Sediment production
 - Bedrock geology
 - Landslide hazard
 - Proximity to impacted reach
- Five high risk subwatersheds:





Temporary Harvest Prohibition

- Prohibition will remain until determination by Executive Officer of significant progress toward improved beneficial uses
- Individual THPs can be approved based on proposed projects that contribute towards correcting beneficial use impairment

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Riparian Management Zones

- RMZs based on Elk River watershed analysis prescriptions
 - 300 feet on Class I
 - 200 feet on Class II
 - 100 feet on Class III
- Equipment exclusion zones
- Highest feasible erosion control standards

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Control of Sediment – Roads

- ✤ All roads "stormproofed" by 2018:
 - Hydrologic disconnection
 - Inventory and treat potential discharge sites
 - Design watercourse crossing for 100year flow
 - Annual inspection and maintenance

Water Boards

Control of Sediment – Non-Road

- CAOs require inventory and treatment of Controllable Sediment Discharge Sources (CSDS)
- Over 80% of high priority sites treated since 2007
- Remaining sites will be treated based on priority and location

Water Boards

Erosion Control Plans for THPs

In-stream Sediment Sources

- Approximately 74% of sediment in Upper Elk River from in-stream sources
- HRC must conduct feasibility studies to evaluate methods to control, trap, or meter sediment:
 - 2017 initial plan
 - 2018 annual updates
 - 2020 final feasibility study report
- If infeasible, resources can be directed to impacted reach

Landslide Prevention

- HCP hillslope prescriptions
- Professional Geologist review for all harvest and road construction/reconstruction
- Maintain landslide inventory
- Periodic aerial photograph review
- Harvest limits
- Riparian protection



Wet Weather Limits

- No timber operations between October 15th and May 1st
- Exceptions allowed for emergency corrective action
- FPR restrictions on operating during saturated soil conditions apply



Enrollment Procedure

- First 5 years HRC must apply for THP enrollment
- After 5 years THPs automatically enrolled upon approval by CAL FIRE
- Staff remain involved in all phases of THP review



Monitoring and Reporting

- Report on covered activities
- Monitoring compliance with requirements
- Periodic summaries
- Evaluate effectiveness of management measures
- Identify and treat new sediment sources
 Track HRC's participation in watershed stewardship

Track water quality and recovery trends

Monitoring

- Inspections
 - Roads
 - THP areas
 - Landslides
- Water quality
 - Aquatic trends monitoring
 - Hydrology and suspended sediment



Reporting

- Annual Summary Report and Work Plan
 - Timber harvest
 - Road work
 - Sediment control
 - Inspections
 - Landslides
 - Water quality
- Five Year Summary Report



WDR Summary

- Acknowledges WQ benefits from HRC's management strategy
- Relies where possible on:
 - HCP prescriptions
 - FPRs that provide water quality protection
- Balance between stringent control measures and HRC's management objectives
- 5-year check-in



Thank You



