

Introduction

- Overview of steelhead and coho salmon life history
- Connections between riparian and salmonid habitat
- County of Santa Cruz Riparian Corridor Protection Ordinance

Steelhead and Coho Salmon Life History

- Family Salmonidae ("salmonids")
- Includes salmon, steelhead, char, whitefish, graylings
- Coldwater fish adapted to recently de-glaciated habitat

Steelhead Trout

- In most streams in Santa Cruz and San Mateo counties
- Steelhead watersheds include Pilarcitos, Pescadero, Waddell, Scotts, San Lorenzo, Soquel, Aptos and Corralitos
- Coastal watersheds in Monterey: Big Sur, Little Sur
- Arroyo Seco

Steelhead Trout

- Listed as threatened under fed ESA
- ESU = Evolutionary Significant Unit
- · Central California Coastal ESU
- South-Central California Coastal ESU

Coho Salmon

- Southern distribution of range
- San Mateo and Santa Cruz counties, including Pescadero, Gazos, Waddell, Scotts and San Vicente
- Listed as threatened under fed ESA
- Listed as endangered under state ESA

Anadromous

- Hatch in fresh water
- Migrate to the ocean
- Return to fresh water to spawn







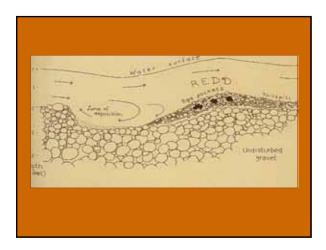


















































What's so great about woody material?

- Creates pool habitat
- Stores sediment
- Provides cover habitat
- Provides winter flow refuge









Impacts to Riparian Habitats









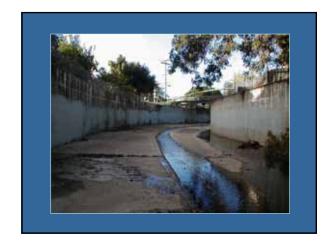














Stream Crossings









County of Santa Cruz

Riparian Corridor and Wetlands Protection Ordinance

Riparian Corridor and Wetlands
Protection Ordinance

Ordinance passed in 1977

Riparian Corridor and Wetlands
Protection Ordinance

- Within stream channel
- Perennial stream: 50' from mean high water
- Intermittent stream: 30' from mean high water
- · Lands containing riparian woodland

Riparian Corridor and Wetlands Protection Ordinance

- 100' from highwater on lake, wetland, estuary, lagoon or natural standing body of water
- Lands within an arroyo within the urban services line

Protected from "development activities"

- Grading
- Land clearing
- Building and paving
- Tree and shrub removal
- Deposition of refuse and debris
- Use of herbicides, pesticides or any toxic chemicals

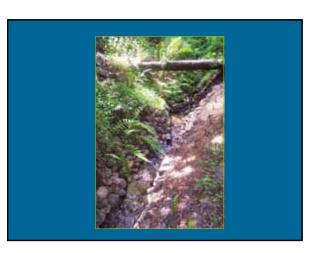
Strengths

- Excellent for new development
- Will be requiring fencing on new development
- Protects riparian woodland

Strengths

- Requires Riparian Exception for any development activities within riparian corridor including:
 - Bank protection
 - Remodels and additions
 - Road crossings and bridges





Revisions

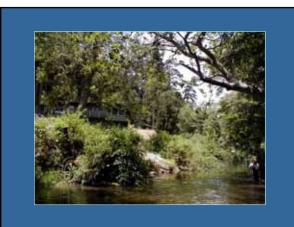
- Will clarify riparian corridors in urban areas (arroyos)
- Will try to encourage other variances

 such as front yard or height over
 riparian exception
- Will exempt certain restoration such as non-native plant removal

Weaknesses

- Most existing uses are exempt
- Existing homes need additions, remodels and bank protection
- Compliance based on complaints only
- No baseline for violations over time





FishNet 4C

- Group of 6 Central California Coastal Counties
- Includes Mendocino, Sonoma, Marin, San Mateo, Santa Cruz and Monterey
- Completed assessment of county policies in 2001

FishNet 4C Recommendations

 Establish generous riparian buffer strips on anadromous streams, wherein development is prohibited

FishNet 4C Recommendations

 Define riparian protection areas on the basis of stream geomorphology rather than vegetation, flooding or arbitrary distances from streams.

Other Riparian Protection Efforts

- County of Marin 100' setback
- City of Santa Cruz

