

# **APPENDIX B**

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Photographs 1-22





1. **August 1913:** Humboldt County redwoods. (Caltrans Transportation Library and History Center, Sacramento)



2. **March 1916:** Building U.S. 101 near San Rafael, California. (Caltrans Transportation Library and History Center, Sacramento)



3. **1920s(?)**: Automobile in the redwoods. (Caltrans Transportation Library and History Center, Sacramento)



4. **June 1953:** U.S. Highway 101 north of Myers Flat in Humboldt County. (Caltrans Transportation Library and History Center, Sacramento)



5. **December 1964:** U.S. Highway 101 flood washout in Richardson Grove reveals the depth of road material. (Courtesy of California State Parks, 2011, Catalog #090-17559)



6. **January 1965:** U.S. Highway 101 flood washout near Myers Flat in Humboldt County reveals the depth of road material. (Caltrans Transportation Library and History Center, Sacramento)



7. **2012:** Tree No. 20 alongside U.S. Highway 101 in Richardson Grove. Very large buttress roots were severed for highway construction, causing the top of the tree to dry out and form a "spike top." No buttress roots of old-growth redwoods would be severed during the Richardson Grove Operational Improvement Project.



8. **2012:** Top of Tree No. 20, showing a "spike top" most likely caused by severance of major buttress roots several decades ago during highway construction. No buttress roots of old-growth redwoods would be severed during the Richardson Grove Operational Improvement Project.



9. **2012:** Trees No. 89 and 90 alongside U.S. Highway 101 in Richardson Grove. Several decades ago, very large buttress roots of these redwoods were severed for highway construction, causing the topmost part of the trees to dry out and form a "spike top." No buttress roots of old-growth redwoods would be severed during the Richardson Grove Operational Improvement Project.



10. **2012:** The tops of Trees No. 89 and 90 showing "spike tops" apparently caused by severance of major buttress roots during highway construction. No buttress roots of old-growth redwoods would be severed during the Richardson Grove Operational Improvement Project.



11. **1933:** This redwood was more than 1,200 years old when it fell in Richardson Grove in 1933. During its lifetime, the depth of soil at its base had increased by about 11 feet because of silt deposited by periodic floods. As soil accumulated, seven distinct layers of roots had formed. (Courtesy of the Marian Koshland Bioscience and Natural Resources Library, University of California, Berkeley: [lib.berkeley.edu/BIOS/](http://lib.berkeley.edu/BIOS/))



12. **2011:** Natural silt deposits alongside coast redwoods adjacent to Bull Creek, in the Rockefeller Grove in Humboldt County. Redwood trunks form new layers of roots below accumulated soil.



13. **2011:** This old-growth coast redwood toppled in the 1950s or 1960s during an extreme flood in Bull Creek. Soil had accumulated alongside the standing tree and new roots had formed from buried trunk tissue. This successful survival tactic enables redwoods to survive repeated flooding and sedimentation.



14. **2011:** Fibrous redwood roots growing alongside Bull Creek in the Rockefeller Grove in Humboldt County. Old-growth redwoods have very wide-spreading structural roots that form massive quantities of fibrous roots that help absorb water and minerals.



15. **1926:** View of Richardson Grove facing north near the current Visitor Center. (Courtesy of the Marian Koshland Bioscience and Natural Resources Library, University of California, Berkeley: [lib.berkeley.edu/BIOS/](http://lib.berkeley.edu/BIOS/))



16. **July 1950:** View of Richardson Grove facing north near the current Visitor Center. (Courtesy of California State Parks, 2011, Catalog #090-17352)



17. **2011:** Current view of Richardson Grove, facing north. The Visitor Center is obscured on the right by young trees growing in a former parking area.



18. **1950s:** Redwoods alongside U.S. Highway 101 as viewed facing west from the current site of the Visitor Center. (Courtesy of California State Parks, 2011, Catalog #090-17293)



19. **2013:** Redwoods alongside U.S. Highway 101, as viewed facing west from the current site of the Visitor Center. A parking area and museum have been replaced by young redwoods, ferns, and duff.



20. **2012:** Heading north on U.S. Highway 101 and entering the redwood grove adjacent to Richardson Grove State Park.



21. **2011:** A helicopter view of Richardson Grove and the Eel River, looking north.



22. **2011:** A helicopter view of Richardson Grove and the Eel River, looking south. U.S. Highway 101 can be seen through the trees.