

BOARD OF FORESTRY AND FIRE PROTECTION

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Short Answer Questions for Study

- 1) Describe the effect of increased carbon dioxide on forest growth.
- 2) List three (3) conditions that demonstrate forest sustainability (note this is not simply sustained yield).
- 3) What is the primary cause of long term natural (not anthropogenic) global climate change?
- 4) What is Tree Improvement?
- 5) What is a Provenance Trial?
- 6) What is a Genotype?
- 7) List three (3) objectives of forest fuel treatments?
- 8) List three (3) effects of sawtimber harvesting on forest carbon sequestration?
- 9) List three (3) results of intense forest wildfire on carbon stocks?
- 10) What is biological diversity?
- 11) List three (3) main sources of genetic diversity in forests?
- 12) What determines the extent of genetic impacts of forest management?
- 13) According to the FPRs and PRC, what is watercourse?
- 14) List three (3) potential impacts of water drafting on aquatic species.
- 15) List three (3) common mitigation measures to reduce sediment leaving water drafting site approaches and entering watercourses?
- 16) What is the Fish and Game Code definition of "Fish"?
- 17) List three (3) common mitigation measures (other than paving) that are commonly used to reduce the potential adverse effects of road dust.
- 18) What are three (3) uses of site indexes in forestry?
- 19) Many forest management decision models (usually computer software aided) are commonly utilized to support forest management decisions. Briefly describe the most common method: Linear programming.

The Board's mission is to lead California in developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable management of forest and rangelands, and a fire protection system that protects and serves the people of the state.

- 20) Briefly describe the basic decision-making process used in forest management planning.
- 21) What is forest succession?
- 22) How is biological diversity described or measured?
- 23) List two (2) anthropogenic disturbance-recovery regimes that have affected western forests in the USA.
- 24) List four (4) general abiotic characteristics used to describe a forest stand.
- 25) Why is it not sufficient to manage for biological diversity at the stand level alone?
- 26) Explain what a significant existing or potentially significant erosion site is.
- 27) Explain what a Significant Sediment Discharge is.
- 28) What are silvics?
- 29) What is silviculture?
- 30) List three (3) common post-fire management activities.
- 31) Following wildfire, what type of damage on residual live trees can rapidly be assessed in the field to predict future delayed mortality?
- 32) As used in Mensuration, what is Stratified Random Sampling?
- 33) As used in Forest genetics and tree improvement, what is a Clone?
- 34) What is CFIP?
- 35) In Forest Management (Genetics), what is a Character (trait)?
- 36) In Forest Ecology, what is ex situ conservation?
- 37) In Forest Management (Genetics), what is Heritability?
- 38) In Forest Management (Genetics), what is Mutation?
- 39) What is photosynthesis?
- 40) What is evapotranspiration?
- 41) What is cellulose?
- 42) What is phloem of a tree, and how does it function?

- 43) As used in Forest Ecology, what is a Permanent Wilting Point?
- 44) What is Science?
- 45) What is a tree?
- 46) What is lignin?
- 47) What is a climax forest?
- 48) What is a saprophyte?
- 49) Define the term "agroforestry".
- 50) What is forest duff?
- 51) As used in log scaling, what is "shake"?
- 52) As used in ecology, what is Tolerance?
- 53) Define Anaerobic as in anaerobic respiration.
- 54) As used in Forest Protection), what is an Endemic Pest?
- 55) As used in Forest Aquatic Ecology (Geology), what is a Particle Size Distribution?
- 56) As used in the FPRs, what is the Road Prism?
- 57) How do the FPRs define a Diseased Tree?
- 58) As used in Forest Engineering, what is Hot-logging?
- 59) Describe the hydrologic cycle.
- 60) As used in Forest Ecology, what is a Dioecious tree?
- 61) In a forest stand, the trees that form the general level of the forest canopy and receive full light from above, but comparatively little from the sides are silviculturally classed as _____
- 62) According to the CCR, an approach to harvesting based on the retention of structural elements or biological legacies (trees, snags, logs, etc.) from the pre-harvest stand for integration into the post-harvest stand to achieve various ecological, social and geomorphic objectives is called _____.
- 63) The Forest Practice Rules and regulations define "functional wildlife habitat" as having three basic features. List these three features _____, _____, _____.

- 64) List any four of the seven characteristics used to determine erosion hazard ratings under the Calif. Forest Practice Rules.
- 65) Briefly describe (three) 3 identification characteristics of California black oak.
- 66) List three (3) silvics of California black oak.
- 67) What is the difference between a stand's arithmetic mean diameter and its quadratic mean diameter?
- 68) For northern California, list three salmonids that have been placed on the Federally Threatened or Endangered list. Give **either** the common **or** scientific names. (Northern California is commonly defined as that geographic region north of the Tehachapi Mountains.)
- 69) Define the term frost heave.
- 70) What California law requires forest practice regulations to address archeological resources?
- 71) *Armillaria species (mellea)* (oak root rot) is endemic in California. What are two ways by which you can decrease the prevalence of this problem in a forest setting?
- 72) List three (3) signs of Armillaria species (mellea) on commercial forest trees.
- 73) The total assimilation of energy and nutrients by an organism or a plant community per unit of time is called _____ production.
- 74) The difference between the greater volumes actually sawn in a mill over the lesser estimated log scale volume is called _____
- 75) A plant specified by law as being undesirable, troublesome and difficult to control is called a _____.
- 76) List FOUR (4) of the *genera* Fagaceae found in North America.
- 77) Hydric (or hygric) is a term pertaining to a wet or moist climate. The term pertaining to an environment THAT is dry or has little moisture is _____ and the term pertaining to an environment with a moderate supply of moisture is _____.
- 78) If one subtracts the present value of costs from the present value of benefits, the residual is called _____
- 79) A scale of 1: 6,000 translates to how many feet on the ground per inch on a map?
- 80) In the California Code of Regulations, trees with well-developed crowns extending above the general level of the forest canopy and receiving full light from above and partly from the sides are termed _____
- 81) By what taxation process is the cost of roads recovered by the forest enterprise?

- 82) On a cable logging system, explain the purpose of the mainline.
- 83) What is the difference between DBH, DOB, and DIB?
- 84) The process whereby a tree or other vegetation loses vigor and may die when growing space is not sufficient to provide light for photosynthesis or moisture to support adequate growth is called _____.
- 85) In harvesting, a self-propelled machine, usually self-loading, that transports trees or logs by carrying them completely off the ground is called a _____.
- 86) Differentiate between an obligate and facultative species of plant.
- 87) Given a true bearing of due east, or 90° between points A and B, and a magnetic declination of 01.00° W, state the magnetic bearing or azimuth reading.
- 88) A composite organism formed from the symbiotic association of a true fungus and algae is a _____.
- 89) In forest fires and other larger public emergencies within the US, a particular organizational system is used to manage the facilities, personnel, participating organizations, equipment and other resources and needs of the emergency. Name this organizational system. (Do not abbreviate)
- 90) According to the California Forest Practice Regulations (FPR), the area on which timber operations are being conducted as shown on the map accompanying the Timber Harvesting Plan, and within 100 feet, as measured on the surface of the ground, from the edge of the traveled surface of appurtenant roads owned or controlled by the timberland owner, timber operator or timber owner, and being used during the harvesting of the particular area, is called the
a. _____.
- 91) What is meant by the term cadastral survey?
- 92) List three (3) ecological roles of commercial hardwoods in California forests that are distinct from commercial conifers.
- 93) In the FPRs, what are Decadent and Deformed Trees of Value to Wildlife?
- 94) List three (3) criteria that are used to determine the significance of an archeological site.
- 95) Wood fiber is made up of four organic substances. Name 3.
- 96) As per 14CCR 895., what is the stream condition where the stage of discharge fills the entire channel cross section without significant inundation of the adjacent floodplain, and, has a recurrence interval of 1.5 to 2.0 years. _____.

- 97) The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of various renewable resources without impairment of the productivity of the land is termed _____ .
- 98) Under the variable retention silvicultural method, what are the three major variables of the retained structures that should be considered?
- 99) When preparing a THP, in general (it is not necessary to identify a specific practice, what must a RPF do when the standard WLPZ (Watercourse and Lake Protection Zone) width and/or standard protective measures (CCR 916.5, 936.5, 956.5) appear to not be adequate to provide protection to the beneficial use of water?
- 100) The deleterious effect of one plant upon another through the production of chemical inhibitors that are released into the environment is called _____
- 101) A commonly hand-held, satellite-based navigational device that records x, y, and z, coordinates and other data allowing users to determine their location on the surface of the earth is called a _____ .(Give entire name rather than abbreviations)
- 102) Define the term: "loam soil".
- 103) The 1976 California Forest Taxation Reform Act made two principal changes in the timberland property taxation law. What were the two changes?
- 104) How do the Forest Practice Rules define "emergency"?
- 105) List three (3) PHYSICAL elements to consider when deciding whether to tractor log or cable log a timber sale?
- 106) Name three types of road surface shape used to facilitate drainage.
- 107) What are the three traditional approaches to timberland valuation.?
- 108) List 3 physical (not biological) environmental conditions or agents which may predispose trees to insect, mite and disease damage.
- 109) The Forest Practice Act is intended to regulate timberlands to achieve what two basic goals?
- 110) Cut-to-length harvesters generally work with a _____ which moves the logs to the landing. While Feller-bunchers usually use a _____ to move bunches of whole trees to the landing.
- 111) What is the difference between a stand's arithmetic mean diameter and its quadratic mean diameter?
- 112) State two silvicultural (not regulatory) reasons that reforestation surveys are done.
- 113) List four counties in the State that have been granted special timber harvesting rules by the Board of Forestry.
- 114) List 3 means (besides a licensing action by the Board of Forestry and Fire Protection), which exist to sanction a RPF by CalFire?

- 115) Under the California Forest Practice Rules, a THP is reviewed by CDF first for acceptance for filing and reviewed again before approval. Under the Forest Practice Rules, what is the basic standard for a THP to be accepted for filing?
- 116) Under the California Forest Practice Rules, a THP is reviewed by CDF first for acceptance for filing and reviewed again before approval. Under the Forest Practice Rules, what is the basic standard for a THP to be accepted for approval after second review?
- 117) Give three silvicultural reasons why seed tree and shelterwood systems are generally not used to regenerate coastal redwood stands.
- 118) Define the term "off-tracking" as it is used in forest road design and what is the common adaptation made in the design of a forest road to accommodate off-tracking. (You may use a sketch to supplement your text answer.
- 119) Increases in stream discharge following various forest management practices have been demonstrated in many parts of the country. Water yield increases as a result of decreased _____ and _____.
- 120) List 3 characteristics of a forested headwaters stream (Strahler orders 1 through 3).
- 121) Name two instruments which are commonly used in variable plot cruising to determine if a tree is to be counted or not counted?
- 122) A geomorphic feature formed by coalescing scars originating from landsliding and erosional processes caused by active stream erosion and is identified as that area situated immediately adjacent to the stream channel below the first break in slope is called an _____.
- 123) State, in general terms, the objectives of the intent section of the Forest Practice Act.
- 124) When planning to build a new private timber access road which joins an existing public (but not federal government) road, what type of permit, other than a THP, is often needed and from which permitting authority?

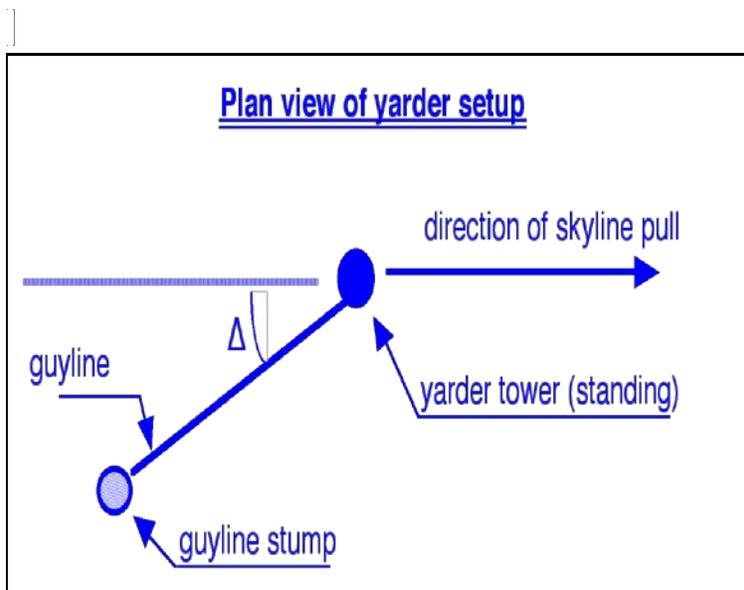
- 125) Define the term chlorosis _____
- 126) How does Net Present Value change as interest rates change? How?
- 127) The genus Accipiter is a group of birds of prey in the family Accipitridae. These birds are slender with short broad rounded wings and a long tail that helps them maneuver in flight. They are commonly found in forested, wooded or shrubby areas. Name a sensitive species of Accipiter that is mentioned in the California FPRs.
- 128) Today, forest managers generally recognize that large woody debris (LWD) is important in influencing the biology and habitat values of streams in temperate ecosystems. List four biological and/or habitat functions of LWD in forested streams of California.

- 129) Define what is meant by the ecological term, "obligate species".
- 130) When an alien or exotic species can establish, grow, reproduce, and maintain itself in an area where it did not originally grow, it is said to be:
- 131) The process by which a landscape is broken into small islands of forest within a mosaic of other forms of land use or ownership is known as:
- 132) An Ecosystem can generally be defined as:
- 133) Why are watercourse crossings critical components of watershed protection in managed forests?
- 134) List three positive ecological roles of forest insects.
- 135) Define Carbon Sequestration.
- 136) Define Forest Carbon Stock.
- 137) What is the common name of a California native fern that may indicate wet conditions in a forested environment?
- 138) Besides CO₂, name three (3) other naturally occurring "greenhouse gases" present in Earth's atmosphere.
- 139) In the forest, there are likely to be life forms other than trees and shrubs. List three life forms of herbaceous plants likely to be found in a forest type in temperate North America (common or scientific names are acceptable).
- 140) Typically, riparian vegetation is more important as a source of energy "inputs" in the headwaters areas of California and other western U.S. rivers than towards the lower end. Briefly explain why.
- 141) The abiotic parts of an ecosystem can generally be defined as:
- 142) Define the term "estimated 100-year flood flow".
- 143) A plant that is more or less restricted to moist sites, but not considered an aquatic plant is termed a _____.
- 144) Describe the difference between litter and humus.
- 145) The total assimilation of energy and nutrients by an organism or a plant community per unit of time is called _____ production.
- 146) A stream that derives most or all of its nutrient energy source from such things as terrestrial insect drop and litter-fall from terrestrial vegetation is described as an _____ type of stream?
- 147) As used in ecology, what is Evapotranspiration?

- 148) What is an Alluvial Soil?
- 149) As used in Ecology, what is an Ecotone?
- 150) Define Dendrochronology and the primary way it is applied.
- 151) As used in Forest Ecology (genetics) and the FPRs Resource Conservation Standards, what is Progeny Testing?
- 152) As used in Forest Ecology and the FPRs regeneration methods, what is a Phenotype?
- 153) As used in ecology, list three causative processes of Evolution.
- 154) Define the term marginal revenue.
- 155) Define the following Financial decision method used for Forest Management Decisions: Benefit Cost ratio (B/C).
- 156) List two (2) types of fixed costs and two (2) types of variable costs generally incurred by Licensed Timber Operators in harvesting operations.
- 157) As utilized to support forest management decisions, what is Linear programming.
- 158) A cost that changes in response to the level of output is what type of cost?
- 159) A logging cost that remains constant regardless of the level of logging output is what type of cost? Give a typical example of this type of logging cost.
- 160) Define the economic term "Externality".
- 161) Define the following Financial decision method used for Forest Management Decisions: Internal Rate of Return (IRR).
- 162) A nonmonetary and rarely calculable toll on society arising from any form of economic activity is termed a _____
- 163) Define the Allowable Cut Effect.
- 164) What is "Discounted cash flow"?
- 165) What is risk in forest management planning?
- 166) A deduction from taxable income, allowed under specific conditions, by U.S. tax laws to the owners of timber for reduction of an original growing stock through cutting is called _____
- 167) For tax purposes, logging equipment is usually depreciated and roads are amortized. By what taxation process is the cost of timber recovered by the forest enterprise?

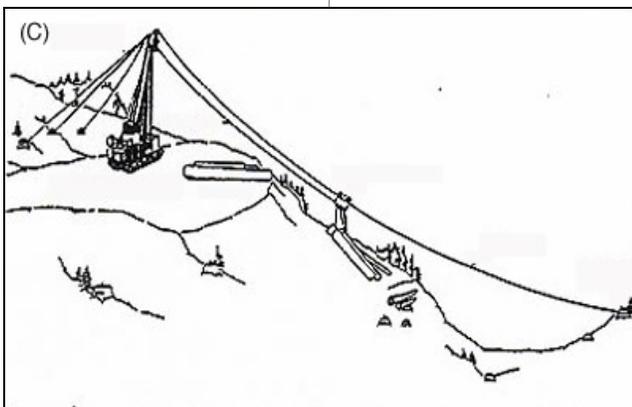
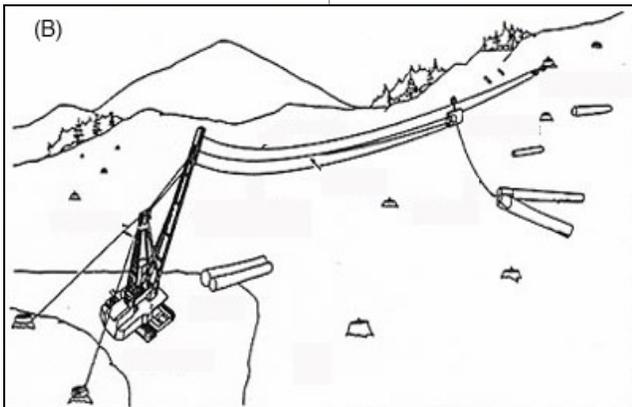
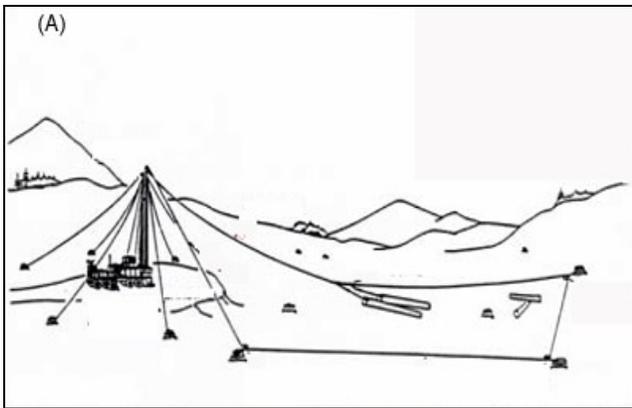
- 168) Define ad valorem tax and give an example of a forest asset taxed in this manner in California.
- 169) Using forest economics as the sole criteria to determine when a project or transaction is economically feasible, what condition must be met?
- 170) The difference between the greater volume actually sawn over the lesser estimated log scale volume is called:
- 171) How do the Forest Practice Rules define "economic feasibility"?
- 172) In economic terms, the actual quantity of a commodity or service that buyers are willing to purchase in the market at a given price over a specified time period is called _____
- 173) Define the term marginal cost.
- 174) What type of tax is levied per timber unit of value harvested to enable the property owner to postpone the taxes normally due until such time as income is received from the property?
- 175) What is the term for a timber sale in which the buyer and seller agree on a total price for marked standing trees or for trees within a defined area before the wood is removed —note the timber is usually paid for before harvesting begins?
- 176) As used in Forest Economics, what is a Supply Curve?
- 177) As used in Forest Economics, what is Economic Fire Protection Theory?
- 178) In the economics of supply and demand, what is a Substitution Effect?
- 179) What is uncertainty in forest management planning?
- 180) As used in Forest Economics, define Elasticity.
- 181) Geotextiles come in basically two forms of fiber arrangement. The two forms of fiber arrangement are:
- 182) If a Public Land Survey section has all normal measurements, how many acres are in the NE1/4 NE1/4 SW1/4 SE1/4?
- 183) According to the definition in 14CCR 895.1, define the condition required in the abandonment of a forest road:
- 184) According to the Forest Practice Rules definition, which of these three major slope forms is most stable: Planar, Divergent or Convergent?
- 185) In mechanized felling, what is the function of an "accumulator"?
- 186) As discussed and diagramed in Technical Addendum # 5, define a Critical Dip.
- 187) Define Avulsion as used in fluvial geomorphology.

- 188) The distance from a landing to the farthest point in the cutting unit is called the:
- 189) In logging terminology, define the term deadman.
- 190) Briefly define a "blind lead or area" in logging terminology and state the obvious negative environmental result which can occur in that situation.
- 191) In a geomorphic feature formed by coalescing scars originating from landslide and processes caused by active stream erosion, the feature that is identified as the area beginning immediately adjacent to the stream channel below the first break in slope is termed:
- 192) You are standing on point A and looking upslope to point B. Point B is 220 ft, slope distance from you, and your abney shows the slope is +22%. How much higher is point B than A?
_____.
- 193) Briefly discuss why a conventional high-lead logging system is not suitable for logging a partial cut harvest unit on steep terrain.
- 194) On a cable logging system, explain the purpose of the haulback line, attached for the next turn.
- 195) In California, name the three Cadastral Survey Base and Meridian Systems used to facilitate and organize the Public Land Survey System in the State.
- 196) In the diagram below, the angle Δ represents the horizontal angle a rear yarder guyline deviates from the skyline's axis of pull. (Assume other guylines are in place but are not shown.) This angle should not usually exceed how many degrees to be effective during yarding? _____



- 197) A rectangular piece of land measures 26.5 chains by 38.7 chains. How many acres are in this piece of property?

- 198) List four factors that have led to the increasing use of the Cut-to-Length harvester over the human system-timber faller and buckler with a chain saw in the U.S. Briefly explain the importance of each factor.
- 199) Differentiate between a live skyline and a standing skyline system.
- 200) A THP map has a scale of 1 inch= 200 ft and has 25 ft contour intervals. A proposed temporary road for a logging unit extends 4.5 inches from one permanent road to the intersection with another permanent road. The proposed temporary road starts on a contour line, crosses four other contour lines and ends, at the landing, on a fifth contour line. What is the grade of this proposed temporary road (round to the nearest percent)? _____
- 201) Shown below are three diagrams of cable logging/yarding systems commonly used in the western U.S., Using the number and configuration of cable-lines, identify each logging system by the the most commonly used name in the field.



- 202) As used in Forest Engineering (Watershed), what is the Time of Concentration?
- 203) As used in Forest Engineering, what is a Forwarding?
- 204) As used in Forest Engineering, what is a Planimetric Map?
- 205) List 2 situations which may occur during field variable plot cruising, when is it important to know the plot radius factor.
- 206) What is the "coefficient of variation" used to measure?
- 207) The extent to which the lower portion of a tree's stem diverges from straight, usually measured in degrees, is termed _____
- 208) Define a bone-dry ton.
- 209) A scale of 1: 6,000 translates to how many feet on the ground per inch on a map?
- 210) The height above ground or (in some regions) above stump height, to which a tree stem is salable for a particular product is commonly termed _____ height.
- 211) What is the radius of a 1/5-acre inventory plot? Round to the nearest tenth.
- 212) A rectangular piece of land measures 40.2 chains by 78.5 chains. How many acres are in this piece of property?
- 213) In performing a Stocking Survey for a plantation area, you lay out a uniform grid as prescribed and sample 80 plots. What would be the minimum number of stocked plots needed to find the area in a stocked status, according to the CA forest practice rules?
- 214) The volume, basal area, or number of trees in a stand that were smaller than a prescribed minimum diameter or height limit at the beginning of any measurement period and that, during that period, attain the prescribed size is called _____
- 215) The Scribner Dec. C log rule differs from the International 1/4" Rule in what basic way?
- 216) A 25-ton load of fresh wood chips is delivered to a biomass co-generation facility. The load of chips has moisture content of 45%. How many dry weight tons in the load of chips?
- 217) For a GPS unit suitable for Forestry Purposes (e.g. Resource Grade unit), list two commonly used coordinate systems a point could be recorded in for GIS or GPS use?
- 218) List four parameters commonly used in growth and yield models?
- 219) If a Public Land Survey section has all normal measurements, how many acres are in the NE1/4 SW1/4 SE 1/4?

- 220) In log scaling, describe what is meant by a "diagram rule".
- 221) What condition must be met to use a local, simple Tarif Table to determine the volume of trees in a Ponderosa pine stand?
- 222) List 4 types of defects that will result in diameter, volume or length deductions by a scaler.
- 223) Both Oregon and California predominantly use the Scribner Dec. C log rule. Briefly describe the main difference in how the rule is used in each state.
- 224) What is the basal area of a 14 inch DBH tree in square feet?
- 225) What is a hypometer? Give two examples of hypometers commonly used by foresters.
- 226) What makes an orthophotograph different from other aerial photographs?
- 227) As used in Silviculture and Mensuration, what is a Stock Table?
- 228) The maintenance of destructive agents (such as insects) at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and environmentally efficient and socially acceptable is termed:
- 229) You have been doing THP fieldwork following a strong windstorm. You find a large bird nest on the ground near a clump of recently downed tall snags. The nest is comprised of large to small sticks and contains a variety of odd items (tin cans bottles, rope, shells) and three oval broken pinkish-white eggs about 2 inches long. What have you likely found?
- 230) List four (4) characteristics of fuels that affect the way fires burn and are important in prescribed fire management.
- 231) What is the primary cause of watercourse crossing failures in northwestern California?
- 232) Which of the following tree species are susceptible to white pine blister rust: Pinus monticola, Pinus lambertiana, Pinus ponderosae, Pinus sabiniana, Pinus attenuata, Pinus contorta?
- 233) Name three retention practices recommended for stand treatments to maintain options for spotted owls on timberlands in the Sierra Nevada?
- 234) As used in the FPRs, what is meant by the term "Properly Functioning Salmonid Habitat"?
- 235) Is the following statement true or false, and briefly state why: Establishing a ponderosa pine plantation adjacent to a residual white fir overstory infected with dwarf mistletoe represents a high risk of spreading the mistletoe to the new understory.
- 236) For THP planning purposes, how would you define an "Active Nest" of an Osprey when you have not seen an Osprey occupy the nest in the 3 months you have been doing THP fieldwork?

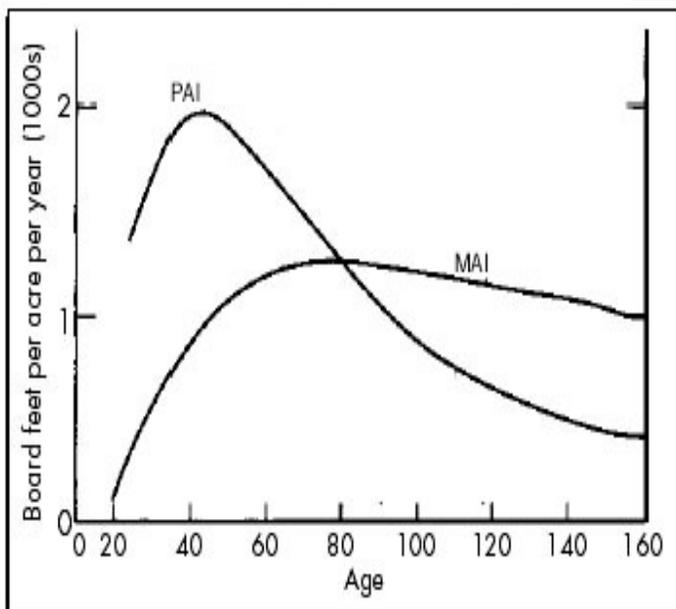
- 237) List 3 non-chemical preventive practices to control forest insects, mites and diseases.
- 238) Name three (3) office evaluation methods for estimating 100-year flood flow at a planned watercourse crossing.
- 239) Combustible materials that provides vertical continuity between vegetation strata and allows fire to climb into the crowns of trees or shrubs are commonly called
- 240) List four (4) environmental or topographic settings that are common locations of prehistoric archeological resources found on California timberlands.
- 241) List three (3) in-stream conditions that can negatively impact fish populations as a result of land management activities.
- 242) For a project on private lands in California, briefly describe the current procedure to obtain a spotted owl database check.
- 243) Define direct and indirect control of insects.
- 244) Name two (2) field techniques for evaluating proposed culvert diameters.
- 245) What is Annosus root rot?
- 246) The use of WLPZs and other mitigations within a THP are intended to provide protection for numerous in-stream and near-stream site factors. List 5 of these site factors specified in the CA Forest Practice Rules.
- 247) What characteristic of true fir requires that special attention be paid to during partial cutting?
- 248) Fire behavior is greatly affected by relative humidity. Define relative humidity.
- 249) Effects on the environment that result from separate, individual actions that, combined, become significant over time are termed _____
- 250) For a Bald Eagle or a Peregrine Falcon, an active nest means a bird nest site at which efforts have recently occurred as determined by CDF&G within the last _____ years.
- 251) The Golden Spotted Oak Borer (*Agrilus auroguttatus*), an invasive woodboring beetle recently located in California, is responsible for the mortality of many thousands of trees in southwestern California. Name two of the three species that are currently experiencing high rates of mortality in California from GSOB infestation. Common or scientific names are acceptable.
- 252) Define the term hyporheic flow and describe one important effect it has on fish habitat.
- 253) According to the FPRs and PRC, what is watercourse?
- 254) List three (3) potential adverse impacts of water drafting on aquatic species.

- 255) Name three (3) Diseases or Invasive Species that may be of concern near water drafting sites?
- 256) Give the scientific names of 3 genera of bark beetles common to California conifers.
- 257) Name three important social issues that are impediments to increased use of prescribed burning.
- 258) What is a forest pest?
- 259) List three (3) life forms of forest pests.
- 260) Define integrated pest management.
- 261) What is stream flow discharge?
- 262) List four purposes a THP document serves during its life:
- 263) The Forest Practice Act is intended to regulate timberlands to assure what two results?
- 264) According to the definitions in the FPR (CCR 895.1), what stream order is required for a planning watershed and generally what is the maximum acreage for a planning watershed?
- 265) Utilization of forest biomass for bioenergy can benefit the people of California in several ways. List three major benefits.
- 266) Under the Forest Practice Act regulations governing "nonindustrial timberland", list three characteristics which define a "nonindustrial" tree farmer.
- 267) There are multiple permit options available for fuel hazard reduction on private and state-owned lands. Under the "La Malfa" Forest Fire Prevention Exemption (CCR 1038(i)), what is the acreage limit that may be treated?
_____.
- 268) To reduce current fuel hazard on timberlands, there are many different permitting options available that do not require a THP. Name two of these options that require the Quadratic Mean Diameter (QMD) of the remaining stand to be increased.
- 269) An agreement between the Secretary of the Interior and either a private entity or another governmental agency, specifying the conservation that will be implemented in exchange for a permit that would allow the incidental taking of a threatened or endangered species is called a _____ (Write out the entire answer, no acronyms).
- 270) Briefly describe the relationship of the Z'Berg-Nejedly Forest Practice Act, the Public Resources Code, and the CCRs to each other.
- 271) When explaining and justifying a proposed alternative practice, what does justification mean?
- 272) List three compatible uses, besides tree growing and harvesting, that may occur on lands zoned TPZ, according to the California Yield Tax Law (disregard local or county defined compatible uses).

- 273) Regional Water Quality Boards and the State Water Resources Control Board in California have the authority to require monitoring and reporting as a condition of any applicable waiver of waste discharge requirements on Timber Harvest Plans. What is the legislative basis for this authority?
- 274) Of the following California legislative acts involving forestry, which one came first, in chronological order (date of passage): Z'berg-Nejedly Forest Practice Act, Forest Taxation Reform Act, Registered Professional Foresters Act? Circle the legislative act that is your answer.
- 275) Certification of forestlands to attest that the management of such lands meets approved standards of a designated authority is common today. Give the complete name of two main certification programs currently being used in the United States.
- 276) As required by CEQA for THP review, what is a THP project alternative?
- 277) What does enforceable standard mean in an alternative THP practice?
- 278) The THP is a part of a process that has been certified as _____ to an EIR subsequent to a decision by the Secretary of the California Resources Agency.
- 279) According to CEQA, list two (2) general types of mitigation.
- 280) What was the impetus (main reason) for California changing to the Yield Tax on timber in 1976?
- 281) Identify one certified specialty under the California Professional Foresters Law.
- 282) What was the most common cause for the lack of Large Woody Debris (LWD) in coastal streams in California?
- 283) List four terms are used to define "taking" under the Federal Endangered Species Act?
- 284) The largest membership class on the Board of Forestry is comprised of what category of members? How many members are from this group if the BOF has a full slate of appointees?
- 285) Who is responsible for implementing **mitigations** that are part of an approved THP?
- 286) In terms of water quality law, define the term TMDL and from what law (s) does it derive?
- 287) Currently, what is the status of the California's Forest Practice Rules (FPRs) as BMPs under Section 208 of the Federal "Clean Water Act"?
- 288) The California Board of Forestry and Fire Protection is appointed from three categories of representation. Briefly describe the basis upon which the members of this Board are selected.
- 289) Under the Endangered Species Act (Federal), what is an "Evolutionary Significant Unit " (ESU)?

- 290) What two criteria in the Endangered Species Act (1976) qualify a species to be listed as an Endangered Species?
- 291) Briefly, summarize three of the Central Policies of the current California Fire Plan.
- 292) List three of the key elements characterizing Defensible Space in the BOF General Guidelines for Creating Defensible Space.
- 293) Give one reason why it is silviculturally more important to thin developing ponderosa pine stands sooner than developing true fir stands?
- 294) You wish to thin a stand of trees to an average 20 ft. x 20 ft. square spacing. How many trees per acre would your thinned stand have on the average acre?
- 295) Consider two California Commercial Conifer stands, both similar in most respects (site, topography, species, successful planting origin, fire and pest effects, etc.), and approaching typical rotation age. One stand was thinned from below 35 Years ago (biomass) and 15 years ago (commercial thin). The other stand had no intermediate treatments. Which stand will have the greater standing cubic volume of wood?
- 296) State two silvicultural reasons that reforestation surveys are done.
- 297) The marking of the most commercially valuable trees for cutting under an individual tree marking regime is normally termed:
- 298) Dunning's Classification is used to classify which species of conifers in the FPRs?
- 299) According to the FPR, which silvicultural method is used to develop an uneven-aged stand from a stand that currently has an unbalanced irregular or even-aged structure. This method is used no more than twice to increase stocking and improve the balance of age classes so as to allow the residual stand to be managed by selection or group selection.
- 300) A written analysis of pre-harvest and post-harvest timber stand conditions and a description of the silvicultural practices and systems to be used in lieu of the standard methods in a Timber Harvest Plan (THP) is termed a _____.
- 301) According to the Forest Practice Rules, the planned program of forest stand treatments during the life of a stand which consists of a number of integrated steps conducted in logical sequence leading to or maintaining a forest stand of distinctive form for the level of management intensity desired is called a _____.
- 302) Give the common name of two deciduous, western U.S. forest tree species that are monoecious and two that are dioecious:
- 303) The establishment of a forest or stand in an area where the preceding vegetation or land use was not forest is called _____.

- 304) Silviculturally, what is usually meant by an intolerant species? Include a common example of a tree species that is intolerant.
- 305) In 2012, the Timber Regulation and Forest Restoration Fund was created. Explain how this Fund is fiscally supported and give two uses for the dollars in this fund.
- 306) Give three reasons why seed tree and shelterwood systems are generally not used to regenerate redwood stands.
- 307) On the graph below, label the graph line that represents Periodic Annual Increment growth (PAI).



a.

- 308) Explain why high grading is generally considered a dysgenic practice.
- 309) As used in Silviculture, what is Stand Structure?
- 310) As used in Silviculture, what is Stand Composition?
- 311) List three specific, quantifiable, field observable, individual tree physical characteristics that a tree marker can use to decide which of two equal sized trees of the same species to retain in a thinning.
- 312) How do the FPRs describe "good" stand vigor within the definition of Stand Vigor?
- 313) As used in the FPRs, describe Dunning's Classification. Include at least three (3) tree characteristics used in the classification.
- 314) As used in the FPRs, what is a Countable Tree? List three (3) of the required criteria for acceptable Countable trees.

- 315) California is rich in natural resources. Of the 85 million acres classified as wildlands, about how many are commercial forest land?
- 316) Name three important social issues that are impediments to increased use of prescribed burning.
- 317) What other law was brought to bear on the Forest Practice Act by the court ruling in Natural Resources Defense Council, Inc. v. Arcata National Corp. (or "Broaddus Decision") [Answer must be written out in its entirety, no abbreviations]?
- 318) As defined in the 2015 CA FPRs, what is a Deactivated Road?
- 319) List four (4) environmental or topographic settings that are common locations of prehistoric archeological resources found on California timberlands.
- 320) A practice or usually a combination of practices that are determined by a state or a designated planning agency to be the most effective and practical means of controlling point and nonpoint sources of pollutants at levels compatible with environmental quality goals is called a (answer is to be given in complete form, not as an abbreviation)
- 321) In a THP, what term is used for an area where the use of heavy equipment associated with timber operations is intentionally limited for the protection of water quality, the beneficial uses of water, and/or other forest resources.

- 322) The FPRs require that RPFs who prepare plans shall consider the range of feasible silvicultural system, operating methods and procedures. How do the Forest Practice Rules define "feasible"?
- 323) In the California Forest Practice Regulations, what is the minimum stand acreage for defining "late successional stands"?
- 324) The Forest Practice Rules allow the Review Team how many days to examine a THP so as to assist the Director in determining if the plan is acceptable for filing as submitted?

- 325) According to the CDFFP guidance concerning large old trees, what is the smallest stand size area that must be disclosed in a THP when large old trees are present and of potential significant adverse impacts pertaining to large old trees may occur?
- 326) A nine-digit code (e.g.1170.40606) that uniquely identifies any of the drainage basins in the United States in a nested arrangement from largest (Regions) to smallest (Cataloging Units) is called a
_____.
- 327) Under the CA Forest Practice Rules, what conditions would a cable road need to have erosion control measures specified in the THP and installed?
- 328) Assume that you are an RPF who prepared a THP for the *plan submitter*. Operations have commenced and been ongoing for three weeks. Doo to a falling out with the plan submitter, you provide a written notice to the

LTO and Plan submitter of your decision to withdraw professional services from the plan. What is the obligation of the LTO at this point?

- 329) According to the CA. Forest Practice Regulations, under what conditions is an on-site meeting between the responsible RPF, preparing a THP (or supervised designee) and the LTO (or supervised designee) required? Also, specify the time interval when this meeting must occur.
- 330) Failing to show known areas of landslides and unstable soils on THPs, could lead to a RPF being charged with which disciplinary offense under the Foresters' Licensing Law?
- 331) According to the general definition in FPR 895.1, the Winter Period is defined as occurring between which dates:
- 332) List any four of the seven characteristics used to determine erosion hazard ratings under the Calif. Forest Practice Rules.
- 333) In a THP, what does the term "Appurtenant" roads mean?
- 334) In 2012, a bill was passed and signed by the governor (AB 1492) that made changes to the life of a THP. Currently what is the total possible effective period of a new THP signed after July 31, 2012?
- 335) The California Forest Practice Rules (FPR) use Technical Addendums to convey certain procedures used to prepare Timber Harvest Plans. Briefly define 4 areas covered by Technical Addendums.
- 336) Briefly describe the distinctions between effectiveness monitoring and implementation monitoring.
- 337) As the RPF retained by the plan submitter to provide professional advice throughout timber operations, you discover a previously unreported potentially significant historic archaeological site. According to the FPR's, list your responsibilities in this matter.
- 338) Dying Trees, as defined for use in the FPRs. means trees which exhibit one or more of certain conditions. List three (3) of the accepted conditions that would define a dying tree.
- 339) The area on which timber operations are being conducted as shown on the map accompanying the Timber Harvesting Plan, and within 100 feet, as measured on the surface of the ground, from the edge of the traveled surface of appurtenant roads owned or controlled by the timberland owner is called the:
- 340) Water bodies that are listed as impaired under Sec. 303(d) of the Federal Clean Water Act, must have a plan called a _____ developed for each pollutant which is a calculation of the maximum amount of a pollutant that a water-body can receive and still meet water quality standards.)
- 341) A Channel Migration Zone is recognized as being a riparian feature, particularly along fish bearing watercourses, which may contribute to the long term functions of riparian habitat. Define a Channel Migration Zone.
- 342) As used in the FPRs, list the four (4) types of road included and one (1) type of road excluded from the permanent road NETWORK?

- 343) As defined in the FPRs, what does “Supervision” mean when an RPF has a supervised designee?
- 344) As used in the FPRs, what does Hydrologic Disconnection mean?
- 345) As used in the FPRs, what is a Significant Sediment Discharge?
- 346) As applied to the growth of an even-aged stand of trees, which parameter peaks first, the volumetric MAI or the volumetric PAI?
- 347) As applied to the growth of an even-aged stand of trees, what is the term for the point where the volumetric MAI is greater than zero and equal to the volumetric PAI?
- 348) Define BI or Burning Index as it is used in Fire management.
- 349) What are the three (3) primary stand management factors controlling the regeneration process (proportion of stand area regenerated per entry and number of gaps created) when utilizing Group Selection Silviculture?
- 350) Why does the concept of MAI not apply well to uneven- age stands?
- 351) A stream that derives most or all of its nutrient energy source from such things as terrestrial insect drop and litter-fall from terrestrial vegetation is described as an:
- 352) High definition remote sensing mapping products called LIDAR images are becoming more common in forestry and natural resource use. Briefly describe the technology creating these images.
- 353) Differentiate between current annual increment and mean annual increment for a given tree?
- 354) Explain how stream "ordering" works in a large watershed (it is a system that compares streams within and among watersheds, e.g.-Strahler System)
- 355) A watercourse with an incised channel that does not shift position on a floodplain and where the channel has no contiguous flat, flood prone areas, and the width of the valley floor is less than 2 times the channel width at bank-full stage is termed a _____.
- 356) The quantity of forage required by one mature cow and her calf (or the equivalent, in sheep or horses, for instance) for one month is termed a _____.
- 357) Briefly describe what is meant by the term “adaptive management” as it applies to forest management.
- 358) Define Anthropogenic.
- 359) As used in Forest Management, what is Sustained Yield?
- 360) As used in Forest Fire Management list four common prescribed fire ignition patterns.
- 361) As used in the FPRs, what is a Road Management Plan? What road management activities does it address?

- 362) What is a growth/stand simulator? List three (3) specific mensurational or forest management uses for growth/stand simulators.
- 363) As used in the FPRs, what are Late Succession Forest Stands?
- 364) As used in Mensuration, what is Stem Analysis?
- 365) As used in the FPRs, what is the Permanent Road Network?
- 366) What is an Engineered Wood Composite?
- 367) As used in Mensuration, Define a Tarif Table
- 368) As used in Forest Mensuration, define and contrast the terms Accuracy and Precision.
- 369) Define Magnetic Declination.
- 370) Briefly explain the difference between Class P-0 and Class 1-1 nursery seedling stock.
- 371) As used in forest archaeology, describe a "midden?"
- 372) As used in forest archaeology, describe a "mano"?
- 373) As used in forest archaeology, name two (2) of the most common stone materials used by prehistoric people in California to make cutting tools.
- 374) As used in forest archaeology, list two (2) characteristics that will confirm whether something you find in the forest might be a chipped stone tool made by prehistoric people.
- 375) Describe a hierarchical (structured, ordered) tree marking rule.
- 376) What is a genetically improved tree?
- 377) While working in the forest you take a rest beneath a grove of Black oak trees above a small spring. While evaluating the nearly flat terrain as a potential landing site you notice a cluster of shallow two to three meter wide roundish depressions in the ground. While still covered with litter and debris you suspect they might once have been: _____
- 378) Name three (3) types of deductions (not defects) taken by log scalers for observable defects.
- 379) List four (4) types of defects that logs volumes will be deducted for by an scaler.
- 380) List four (4) known characteristics of nesting habitat of Marbled Murrelets (*Brachyramphus marmoratus*) in California.
- 381) What do the FPRs state the RPF must describe in a Fuelbreak/Defensible Space prescription?

- 382) What is a Community Fuelbreak area?
- 383) What is a multi-stemmed Aspen clone and how is it initially created?
- 384) Anthropogenic effects on global climate include cultural practices associated with agriculture and livestock, clearing and burning of forests, and burning fossil fuels each of which in turn elevate carbon dioxide and methane far above natural levels. Describe the effect of increased carbon dioxide on forest growth.
- 385) What is the basis of Tree Improvement?
- 386) What is a Genotype?
- 387) What is a "Plus Tree"?
- 388) What is a Provenance Trial?
- 389) What is forest succession?
- 390) What are the three (3) components required to have a forest fire?
- 391) What is a WUI and how do they affect fuel and fire management options?
- 392) What is Fuel Management?
- 393) What is a Prescribed Fire?
- 394) What is a Prescribed Fire Prescription? What physical elements does a Prescribed Fire Prescription address?
- 395) What is forest Site? How is forest Site (not site index) Classified?
- 396) What are two (2) of the three site index systems used in the FPRs?
- 397) Name three (3) objectives of thinning.
- 398) As used in Silviculture, what is stand density?
- 399) As used in Silviculture, what is the stand density as shown in "normal stand tables"?
- 400) As used in Silviculture, what is relative stand density?
- 401) As used in Silviculture, what is stand density management?
- 402) As used in Silviculture, what are density management diagrams?
- 403) What ethical duty do you owe to the "real party of interest" in your agreement to prepare a THP?

- 404) What are the tree marking requirements in the FPRs when utilizing the Selection harvest method?
- 405) According to the FPRs. what are the primary attributes of the Unevenaged Selection silviculture system?
- 406) In Forest Management (Genetics), what is a Cline?
- 407) In Forest Management (Genetics), what is Combining ability?
- 408) In Forest Management (Genetics), what is Controlled pollination?
- 409) In Forest Ecology, what is ex situ conservation?
- 410) In Forest Management (Genetics), what is Fitness?
- 411) What is Forest Genetics?
- 412) In Forest Management (Genetics), what is Genetic drift?
- 413) In Forest Management (Genetics), what is Genetic gain?
- 414) In Forest Management (Genetics), what is Geographic variation?
- 415) In Forest Management (Genetics), what is Heritability?
- 416) In Forest Management (Genetics), what is Mutation?
- 417) In Forest Management (Genetics), what is Resilience?
- 418) In Forest Management (Genetics), what is a Seed zone?
- 419) How much forest is there in the world? How has this changed over the past 10,000 years?
- 420) Would the plantation of new forests compensate for tropical deforestation, Why?
- 421) Do trees ever give off carbon dioxide? If so, when?
- 422) What is cellulose?
- 423) What is a cotyledon?
- 424) How many square feet in an acre?
- 425) What is the cambium layer of a tree?
- 426) What is phloem of a tree, and how does it function?
- 427) What are the Stomata of a tree, and how do they function?

- 428) What is xylem of a tree, and how does it function?
- 429) What is a tree?
- 430) What is a climax forest?
- 431) What is lignin?
- 432) What percent of the earth's land surface is covered by trees?
- 433) Define the term "agroforestry".
- 434) What is a saprophyte?
- 435) As used in Forest Protection, what is a conk?
- 436) What two (2) factors slow down the cell division in the cambium during the course of the growing season?
- 437) Describe simple tests to determine if any two (2) of these species (Ponderosa Pine, Douglas Fir, Sugar Pine, White Fir) cones are ripe?
- 438) Regulating the composition to improve quality of a very young stand is called
- 439) What is meant by the term "kerf"?
- 440) What are the two most important uses for USA's timber harvest?
- 441) As used in plant succession, what is a Xerosere?
- 442) As used in Silviculture, what is a Free Thinning?
- 443) As used in Forest Range Management, what is a Decreaser Plant Species?
- 444) Define Allelopathy.
- 445) Define Anaerobic as in anaerobic respiration.
- 446) Define Antecedent Soil Moisture.
- 447) As used in Forest Ecology (genetics), what is a Population?
- 448) As used in Forest Ecology, what is a Permanent Wilting Point?
- 449) As used in the FPRs, what is the Road Approach?
- 450) As used in the FPRs, what is the Road Prism?

- 451) As used in Forest Aquatic Ecology, what is a Dissolved Oxygen?
- 452) As used in Forest Aquatic Ecology, what is a Dissolved Organic Matter?
- 453) What is Oriented Strand Board (OSB)?
- 454) What is a Laminated Veneer Lumber?
- 455) In Forest Economics, what is an Equilibrium State?
- 456) How do the FPRs define a Danger Tree?
- 457) How do the FPRs define a Brood Material?
- 458) How do the FPRs define the Fire Protection Zone?
- 459) As used in Forest Engineering, what is an Interlocking Yarder?
- 460) Describe the hydrologic cycle.
- 461) As used in Mensuration, what is Stratified Random Sampling?
- 462) Define the following Financial decision method used for Forest Management Decisions: Present Net Value (PNV).

Short answer questions to add to review list 2020 - 2023

When you are presenting forestry information in a public meeting as a RPF representing a client, what must you tell the audience as you begin your talk?

What are the main individual tree characteristics that determine a tree's relative resistance to fire mortality?

List three (3) physical locations in a forested watershed that are most at risk of fire ignitions?

What is Fire?

How are wildland fires typically ignited?

What is a fire regime?

Once fuels have been ignited, what three (3) physical processes of fire move heat through the forest?

What is an erosion control mat? How does it function?

What is Log Erosion Barrier (contour log felling)? How does it function?



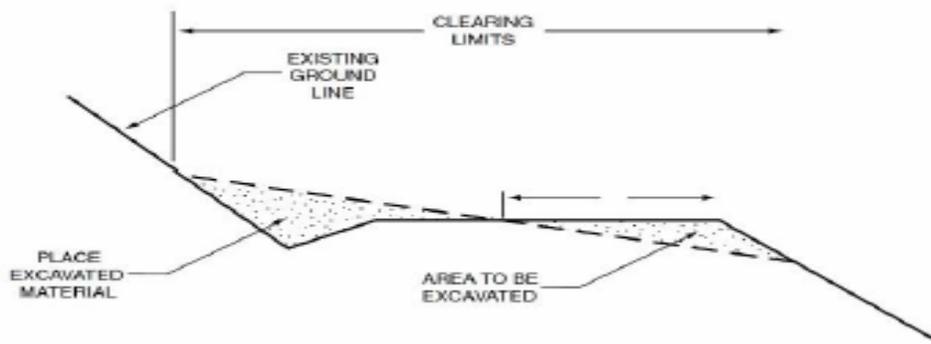
What does this picture (above) depict and what is its function



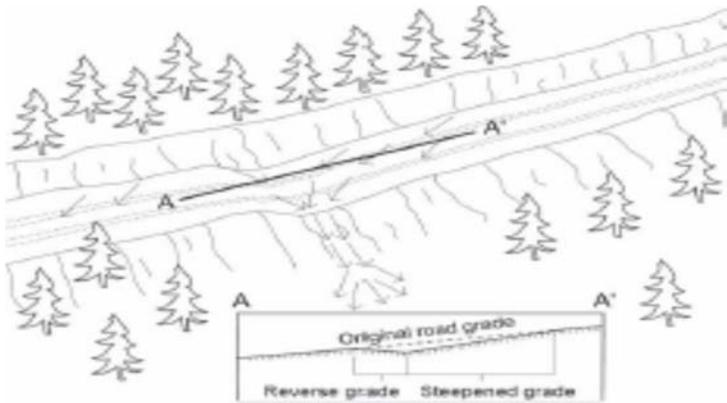
What does this picture (above) depict in a post fire landscape and what is their function? Where might this be effective?



What does this picture (above) depict in a post fire landscape and what is its function? Where might this be effective?



What does this drawing (above) depict and what is its function?



What does this drawing (above) depict and what is its function?



What does this picture (above) depict and what is its function in a post fire landscape?

Briefly discuss the fire adaptive traits of trees.

Briefly describe the various methods of reproduction that allow plants to occupy a post wildland fire plant community. Which method(s) facilitate rapid dominance?

Briefly discuss the primary effect on wildlife of mixed intensity wildland fire.

What types of wildlife commonly benefit from mixed intensity wildland fire? Why?

What happens to invertebrates after a mixed intensity wildland fire? Why?

What general effects do mixed-intensity wildland fire have on soils? What determines the amount soil change?

What factors determine the amount of erosion that occurs after a mixed-intensity wildland fire?

From a management perspective, define how objectives influence what are damages versus benefits from wildland fire?

Other than economics and safety, what are the potential benefits of fire salvage harvests? 3%

What change in Cal Fire policy is required to utilize Prescribed Natural Fire

How does thinning a sawtimber stand from below influence its resilience to wildland fire?

After a wildland fire, timber owners may be able to deduct losses from federal taxes. How do they determine their deduction?

For tax purposes, the cost, or the measure of your investment in the timber you own is the property's _____

What is a forest seed orchard? What is their value?



What are the two main types of seed orchards?

What type of Timberlands may need an Accepted/ Approved Document from CAL FIRE to move forward with A HARVEST Project?

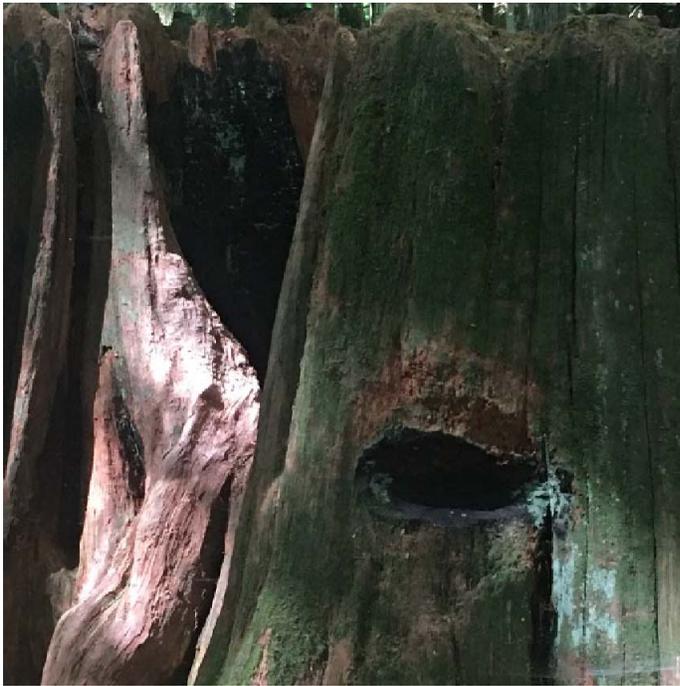
Describe three (3) issues you must address before you begin a water drafting project to help determine if it may have the potential to affect fish and wildlife resources.

In a forest project financial analysis, what are sunk costs?

How are sunk costs accounted for when making decisions about continued investment in a project?



#7

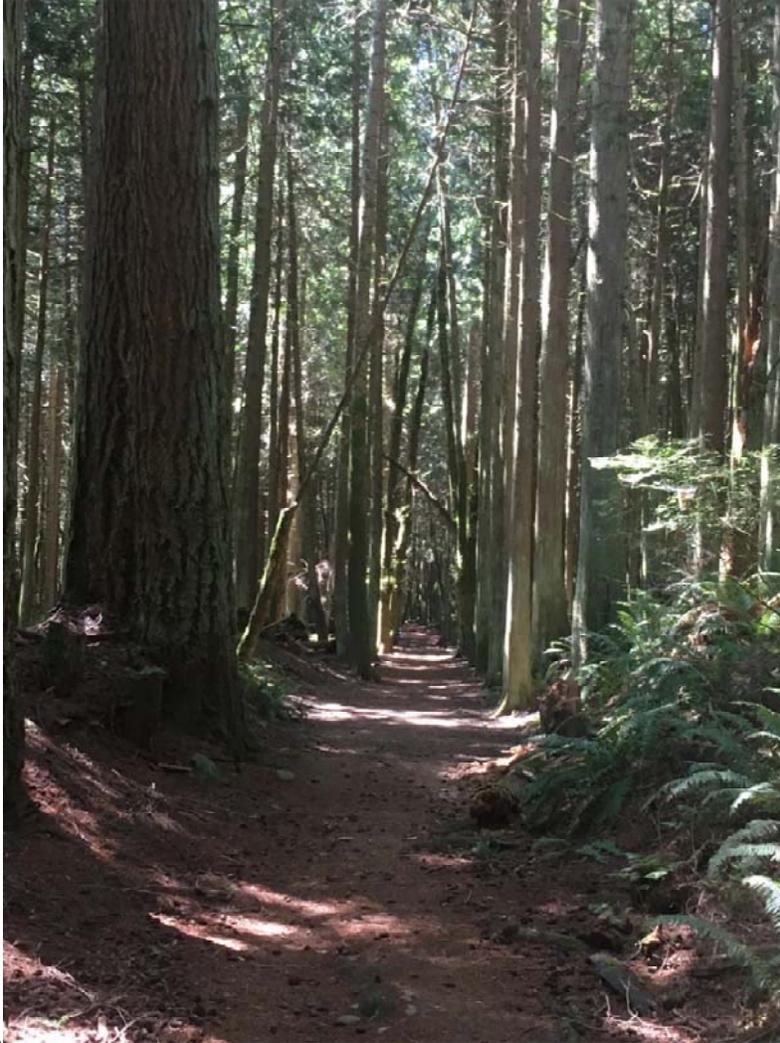


What caused these ~ 8" high by 10" wide black holes in this seven-foot-tall cedar stump? What does this tell you about the method and ~ date of this tree's harvest?

8.



How might modeling rate the fire safety in this site 3 PP stand? Explain your conclusion.



9.

In the above photo, what does this artifact forest opening with constant ~10 foot wide, 2-3% grade, and 4 to 8 foot deep through-cuts tell you about the likely log transport method used in the primary forest harvest?



10

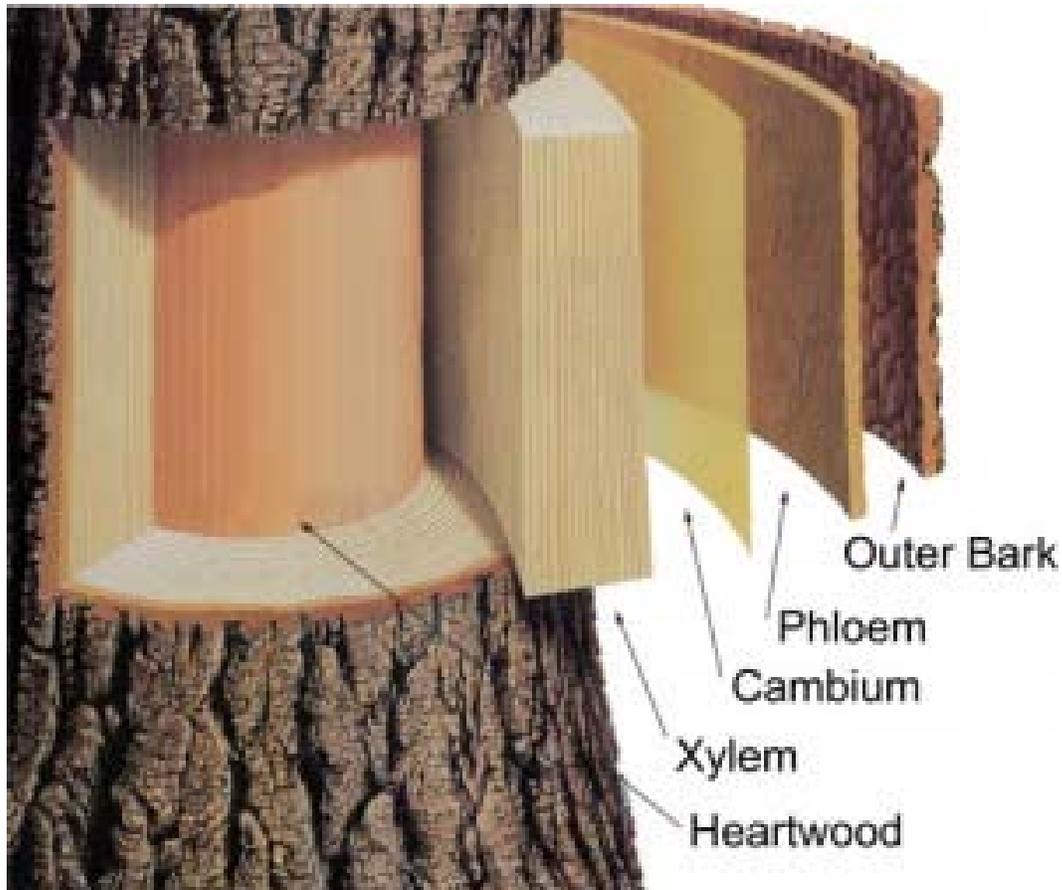
What In what secondary successional stage is this DF, cedar, alder stand? Forest floor primarily down trees 6" to 12" diameter in various states of decay, branch and leaf debris. Main canopy 90% closed, codominant trees 16 to 28" dbh with < 30 % live crown.

What succession stage will follow that which you identified from the # 10 photo above (absent harvest or catastrophic disturbance)? When will it occur and how long will it last?



Assume you must cut only one of the two PP codominant trees at above photo center in this mixed conifer stand managed by single tree selection for timber production. The next subsequent harvest is 15 years in the future. Which do you cut? Explain your conclusion.

What is a Basal Area Factor (BAF)? How is BAF applied in sampling?



Name the tree parts. A, B, C, D, E.

What is the most important concern when developing seed orchards?

When managing the density of sawtimber forest stands, what is the most important factor outside the managed forest?

California's 2018 Strategic Fire Plan focuses on two primary activities. List them and briefly describe their intended results.

What is the vision of the 2018 Strategic Fire Plan for California?

What is 3P sampling? Describe the basic field process for 3P sampling.

What four (4) conditions must be met to allow a waiver of standard stocking procedures?

How is a "Stand" defined in the Z'BERG-NEJEDLY FOREST PRACTICE ACT?

What is the California State Safe Harbor Agreement (SHA) Program?

What are three (3) benefits the landowner receives under the California State Safe Harbor Agreement (SHA) Program?

List four (4) legislative intentions of the Timber Regulation and Forest Restoration Fund.?

In forest economics, what is sensitivity analysis?

In forest ecology what does edaphic mean? State two examples of edaphic controlled forest conditions.

According to the FPRs, what is the Channel Migration Zone?

List four (4) angiosperm group B commercial species for any one forest district you specify. Common names acceptable.

Pursuant to the FPRs, list four (4) criteria required to qualify a tree as “countable” in stocking.

According to the FPRs, what are Decadent and Deformed Trees of Value to Wildlife?

Define “fluvial” processes.

How do the FPRs describe functional wildlife habitat?

What is a hydric soil?

What do the FPRs require during timber operations about treatment of road running surfaces?

Describe the forest decision making process.

What logging area access system features are included in the FPR required maintenance period?

According to the FPRs, what are the standards to which drainage facilities and drainage structures shall be maintained?

In forest economics, what is an opportunity cost?

What are Native American Archaeological Sites? What must be identified to confirm their existence?

Describe the Program Timberland Environmental Impact Report (PTEIR)?

Per the FPRs, what are Reasonably Foreseeable Probable Future Projects?

What are the Resource Conservation Standards for Minimum Stocking in a district of your choice?

How does a forester determine if a tree near the edge of a $\frac{1}{4}$ acre circular plot on a 30 % slope is “in” or “out”? The slope correction factor for 30% is 1.04. Give an example and Show your calculations.