CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NORTH COAST REGION

CLEANUP AND ABATEMENT ORDER NO. R1-2015-0048
FOR
JENNIFER NIELSEN, ASSESSOR PARCEL NUMBER 210-141-011
WDID 1B14099CNHU

HUMBOLDT COUNTY

This Order is issued to Jennifer Nielsen (hereinafter referred to as Discharger) based on provisions of Water Code section 13304, which authorizes the North Coast Regional Water Quality Control Board (Regional Water Board) to issue a Cleanup and Abatement Order ("Order"), and Water Code section 13267, which authorizes the Regional Water Board to require the preparation and submittal of technical and monitoring reports.

The Assistant Executive Officer finds, with respect to the Discharger's acts, or failure to act, the following:

1. **Purpose of the Order:** This Order requires the Discharger to eliminate the threat of future discharges and clean up and abate the effects of discharges of soil, rock and miscellaneous debris into unnamed tributaries to Dairy Creek, which drains to the South Fork Van Duzen River. The unnamed tributaries are considered waters of the state, as well as waters of the United States. (References hereinafter to waters of the United States are inclusive of waters of the state.)[1] The Discharger constructed an instream pond by placing earthen fill material into the confluence of two first order streams and a second order stream to form a dam. The Discharger also graded roads and constructed two earthen pads for greenhouses in a manner that concentrated drainage to receiving waters, increased erosion and sediment transport to receiving waters, and may be causing water to drain onto an unstable slope in one location. These activities were conducted without authorization from applicable federal, state, and local agencies, including the Regional Water Board. The work was performed to support marijuana cultivation activities. This Order requires investigation and cleanup in compliance with the Water Code, the Water Quality Control Plan for the North Coast Region (Basin Plan), Resolution 92-49, and other applicable Regional Water Board plans, policies, and regulations.

[1] The Regional Water Board administers and enforces the Clean Water Act (CWA). The CWA regulates what it refers to as "navigable waters" and defines those waters as "waters of the United States." Waters of the United States have been interpreted broadly by the agencies responsible for implementing the CWA to include all traditionally navigable waters and their tributaries. (40 C.FR. 122.2) The Porter-Cologne Water Quality Control Act (Porter Cologne) provides the Regional Water Board additional authority to regulate discharges of waste into "waters of the state." (Water Code § 13260.) The term "water of the state" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code § 13050(3).) All waters of the United States that are within the boundaries of California are also waters of the state for purposes of Porter-Cologne.

2. **Responsible Parties:** The Discharger, as the property owner and/or person discharging or creating a threat of discharge, is a responsible party for purposes of this Order.

    a. Per records from the Humboldt County Assessor-Recorder's Office, Jennifer Nielsen is the owner of record for the property identified as Assessor Parcel 210-141-011 (hereinafter referred to as Site).

    b. The Regional Water Board reserves the right to amend this CAO to add additional responsible parties when/if those parties are identified.

3. **Site Location and Description:** The Site is located approximately 21 miles east of Bridgeville, North Northwest of Swayback Ridge, in Section 35, Township 1 North and Range 5 East, in Humboldt County. Grading and fill activities occurred onsite and in unnamed tributaries to Dairy Creek. This location is approximately 1.5-2 miles upstream of Dairy Creek's confluence with the South Fork Van Duzen River.

4. **Site History:** According to records from the Humboldt County Assessor-Recorder's Office, Jennifer Nielsen purchased APN 210-141-011 in May of 2010. There is no record of the Site having prior regulatory oversight or history with the Regional Water Board.

5. **Basis of Order:** The Discharger's activities and/or the conditions observed onsite, as detailed below, created and/or threaten to create, conditions of pollution in waters of the state by unreasonably impacting water quality and beneficial uses.

    a. Construction of an instream pond by placing earthen fill materials into the confluence of two first order streams (Class III[2]) and a second order (Class II[3]) stream. The earthen materials were placed in the streams to form a dam, the fill materials were placed around standing trees, and a makeshift spillway was installed that appeared to lead to overtopping of the dam prior to effectively distributing water. The earthen materials used in dam construction appeared poorly compacted, as evidenced by the tree trunks protruding from loose earthen fill materials.

    b. Construction of roads and an earthen pad (6400 ft^2) and construction and use of a large greenhouse (approximately 5320 ft^2) within 30 feet of the two Class III and a Class II streams previously referred to, erosion rills and the beginning of a gully

[2] California Forest Practice Rules define a Class III watercourse as a watercourse with no aquatic life present, and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions after completion of timber operations.

[3] California Forest Practice Rules define a Class II watercourse as 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present. The definition excludes Class III watercourses from the exception.

showed that the runoff from the greenhouse had historically delivered to the pond, and Google Earth Imagery showed historic delivery of the runoff to the larger second order stream below the instream dam structure. Under natural circumstances, this is a slope that would have drained evenly, without concentration of surface flows, providing incremental increases to the stream along its continuous length without erosion.

c. Miscellaneous debris spread around the base of the larger greenhouse and some plastic sheeting and trash in the nearest stream channel.

d. Construction and use of four small greenhouses on an earthen pad 200 feet above the Class II stream downslope from the Site. The surface runoff was concentrated on this greenhouse pad, and subsequently discharged through the ditch outlet onto the slopes below leading to the Class II stream. The ground between the greenhouses and stream appeared hummocky, and had several visible small surficial slope failures. The concentrated drainage may be displacing water onto an unstable slope.

6. **Beneficial Uses and Water Quality Objectives:** The Basin Plan designates beneficial uses, establishes water quality objectives, contains implementation programs for achieving objectives, and incorporates by reference, plans and policies adopted by the State Water Resources Control Board. Dairy Creek is a tributary of the South Fork Van Duzen River, which is federal Clean Water Act section 303(d) listed as impaired for sediment. In December 1999, the United States Environmental Protection Agency approved a Total Maximum Daily Load for sediment in the Van Duzen River. Existing and potential beneficial uses for the Bridgeville Hydrologic Subarea of the Van Duzen River Hydrologic Area potentially affected by the activities described herein include the following: Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PRO); Groundwater Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Wildlife Habitat (WILD); Rare Threatened or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, reproduction, and/or Early Development (SPWN); and Aquaculture (AQUA). Beneficial uses of any specifically identified water body generally apply to all of its tributaries.

a. The Basin Plan contains specific standards and provisions for maintaining high quality waters of the state that provide protection to the beneficial uses listed above. The Basin Plan's Action Plan for Logging, Construction and Associated Activities (Action Plan) includes two prohibitions (Page 4-26 of the 2007 Basin Plan):

i. Prohibition 1 - "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited."

ii. Prohibition 2 - "The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited."

b. Section 3 of the Basin Plan contains water quality objectives that specify limitations on certain water quality parameters not to be exceeded as a result of waste discharges. The water quality objectives that are considered of particular importance in protecting the beneficial uses from unreasonable effects due to waste discharges from land development and marijuana cultivation activities include the following:

i. Color: Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.

ii. Suspended Material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

iii. Settleable Material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

iv. Sediment: The suspended sediment load and suspended discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

v. Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring back ground levels. Allowable zones within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

vi. Biostimulatory Substances: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths, cause nuisance or adversely affect the beneficial uses.

c. The State Water Board has adopted Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304* (Resolution No. 92-49). Resolution No. 92-49 sets forth the policies

and procedures for investigation and cleanup and abatement of discharges under Water Code section 13304, and requires that cleanup levels be consistent with State Water Board Resolution No. 68-16, the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution No. 68-16), which is included as Appendix 6 of the Basin Plan. Thus, Resolution No. 92-49 requires the waste to be cleaned up in a manner that promotes attainment of either background water quality, or the best water quality that is reasonable if background levels of water quality cannot be restored. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

7. **Failure to Obtain Necessary Permits:** Regional Water Board staff determined that the instream pond construction, road and pad grading, and clearing activities at the Site occurred without coverage under any of the following regulatory permits:

    - a National Pollutant Discharge Elimination System (NPDES) permit for land disturbance greater than an acre (Construction General Permit Order No. 2009-0009-DWQ);
    - a Clean Water Act (CWA) section 404 permit from the Army Corps of Engineers;
    - a CWA section 401 Water Quality Certification from the Regional Water Board;
    - a Department of Fish and Wildlife Streambed Alteration Agreement; nor
    - a grading permit from Humboldt County.

8. **Clean Water Act Violations:** The Clean Water Act (CWA) prohibits certain discharges of storm water containing pollutants except in compliance with a Section 402 NPDES permit, or a Section 404 permit and Section 401 water quality certification. Discharges to surface waters comprised of storm water associated with construction activity, including clearing, grading, excavation, and other land disturbance activities (except operations that result in disturbance of less than one acre of total land area and which are not part of a larger common plan of development or sale), are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities, NPDES No. CAS000002, Order No. 2009-0009-DWQ (General Permit). Furthermore, CWA section 404 requires any person proposing to discharge dredge or fill material into navigable waters of the United States to obtain a Section 404 permit prior to such discharge. CWA section 401 requires that any person obtaining a Section 404 permit obtain water quality certification from the state in which the dredge or fill occurs.

a. Staff documented several areas on the Site where sediment-laden storm water runoff from disturbed surfaces had concentrated and discharged to the unnamed tributaries. The Site has been developed for marijuana cultivation.

b. Considered together, the instream disturbance, graded areas, greenhouse pads, and operational roads to and on the Site represent an acre of ground disturbance subject to erosion.

c. More than 50 cubic yards (yd^3) of fill material was placed into Class II and Class III stream channels of the unnamed tributaries in order to construct the dam and unauthorized reservoir.

9. **Water Code Violations:** As described above, the Discharger and/or their agent(s) have caused ground disturbance in and adjacent to streams, and have placed earthen materials and debris into and adjacent to three streams where such materials are in and can pass into waters of the state and United States, in quantities likely deleterious to fish, wildlife and other beneficial uses in violation of Water Code sections 13260[4] and 13376[5], and the waste discharge prohibitions contained in the Basin Plan and discussed in detail above in Finding 6 (a).

a. Water Code section 13304(a) states, in relevant part:

Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and causes, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts….Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall

[4] Pursuant to Water Code section 13260 (a)(1) "[a]ny person discharging waste or proposing to discharge waste, within any region that could affect the quality of the waters of the state…" shall file a report of waste discharge. The Regional Water Board has not received a 401 application or report of waste discharge for wastes discharged at the Site.

[5] Pursuant to Water Code section 13376 "[a]ny person discharging pollutants or proposing to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or any person discharging dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of the discharge in compliance with the procedures set forth in Section 13260, except that no report need be filed under this section for discharges that are not subject to the permit application requirements of the Federal Water Pollution Control Act, as amended."

have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

b. Sediment, when discharged to waters of the state, is a "waste" as defined in Water Code section 13050. The Discharger has discharged waste directly into surface waters of unnamed tributaries to Dairy Creek, which are tributaries of the South Fork Van Duzen River.

c. The beneficial uses of the Van Duzen River discussed above in Finding 6 also apply to Dairy Creek and the unnamed tributaries.

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d. "Pollution" is defined by Water Code section 13050, subdivision (l)(1) as,

an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:
1. The waters for beneficial uses;
2. Facilities which serve these beneficial uses.

e. "Nuisance" is defined by Water Code section 13050, subdivision (m) as, *anything which meets all of the following requirements:*

1. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
2. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
3. Occurs during, or as a result of, the treatment or disposal of wastes.

f. The Discharger's construction and dam building activities have resulted in the unauthorized discharge of waste into surface waters and surface water drainage courses and have created, and threaten to create, a condition of pollution by unreasonably affecting the beneficial uses of waters of the state.

i. The discharge of organic and earthen material in the Van Duzen River watershed is especially problematic because, as noted above, the Van Duzen River watershed is listed as an impaired water body under Section 303(d) of the Clean Water Act due to sedimentation/siltation. The sources of the impairment are identified in the Van Duzen River Total Maximum Daily Load (TMDL) as road related erosion, road construction related erosion, legacy erosion, and timber harvest related erosion. These sources can affect beneficial uses of water

through sedimentation, threat of sedimentation, impairment of spawning and rearing habitat, and reduction in cold water and available cold water habitat.

ii. The activities conducted on the Site increase the potential for impacts to the beneficial uses of water through sediment introduction directly into a stream that flows to fish bearing habitat approximately ½-1 mile downstream. Discharges of sediment and other inert material alter the hydrologic and sediment transport regimes of the unnamed tributaries and Dairy Creek by affecting the flow of water and establishment of vegetation. Such changes may lead to adverse conditions such as flooding, increases in suspended sediment and turbidity, accelerated erosion of the adjacent channel bed or banks, and localized accumulation of deleterious materials. Additionally, such discharges directly threaten habitat for aquatic species dependent upon native sediment and vegetation characteristics (RARE, MIGR, SPWN, COLD, COMM, and WILD). Increased sedimentation and turbidity can result in increased treatment and/or maintenance costs for downstream agricultural and municipal users that withdraw and treat the water (AGR, and MUN). Sediment laden storm water discharges to and the resulting turbidity within surface waters can also affect the recreational and aesthetic enjoyment of the surface waters (REC-1, REC-2).

iii. Suspended sediment in surface waters can cause harm to aquatic organisms by abrasion of surface membranes, interference with respiration, and sensory perception in aquatic fauna. Suspended sediment can reduce photosynthesis in and survival of aquatic life by limiting the transmittance of light. The Basin Plan contains a water quality objective for sediment, which concludes that the suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. As stated above, sediment is a pollutant that can have substantial biological, chemical, and physical effects on receiving waters. These include (1) increased turbidity (loss of clarity) and resulting decreased light transmittance, biological productivity, and aesthetic value; and (2) physical suffocation through burial of bottom dwelling (benthic) organisms, and salmonid eggs, and alevin. Sediment can also physically damage gills causing fish mortality; increase physiological stress; cause difficulty respiring and feeding; reduced reproduction; impair normal feeding and predator avoidance behaviors, result in impacts to commercial and recreational fishing resources; increase water temperature, and fill in lagoons and wetlands converting them from aquatic to terrestrial habitat. It should be noted that these water quality impacts occur both during sediment transport and sediment deposition. In addition to the problems associated with “clean” sediment, sediment is also an excellent transport mechanism for toxics (e.g., metals and synthetic organics), which bind to sediment particles and adversely affects REC-1, REC-2, COLD, SPWN, RARE, MIGR, COMM, MUN, and WILD.

10. **Cleanup and Abatement Action Necessary:** Improperly constructed dams and untreated storm water from property owned and/or operated by the Discharger has discharged, and still has the potential to discharge, sediment and other wastes into unnamed tributaries to Dairy Creek. Because of the unpermitted work, more than 100 yd^3 of earthen fill material remains in and adjacent to unnamed tributaries to Dairy Creek. Cleanup and abatement action is necessary to ensure that the existing condition of pollution or nuisance is cleaned up, that threatened unauthorized discharges from the Site are prevented, and that any impacts to beneficial uses are mitigated. The current condition of pollution is a priority violation and the issuance of a cleanup and abatement order pursuant to Water Code section 13304 is appropriate and consistent with policies of the Regional Water Board.

11. **Technical Reports Required:** Water Code section 13267(a) provides that the Regional Water Board may investigate the quality of any water of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267 (b) provides that the Regional Water Board, in conducting an investigation, may require a Discharger to furnish, under penalty of perjury, technical or monitoring program reports. The technical reports required by this Order are necessary to assure compliance with this Order and to protect the waters of the state. The technical reports are further necessary to demonstrate that appropriate methods will be used to cleanup waste discharged to surface waters and surface water drainage courses and to ensure that cleanup complies with Basin Plan requirements. In accordance with Water Code section 13267(b), the findings in this Order provide the Discharger with a written explanation and evidence with regard to the need to implement cleanup, abatement and restoration actions and submit reports. The Discharger named in this Order owns and/or operates the site from which waste was discharged, and thus are appropriately responsible for providing the reports.

12. **California Environmental Quality Act:** Issuance of this Order is being taken for the protection of the environment and to enforce the laws and regulations administered by the Regional Water Board and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061 (b) (3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup and restoration activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. To the extent that the Order requires earth disturbing and revegetation activities not to exceed five acres in size and to assure restoration of stream habitat and prevent erosion, this Order is exempt from provisions of CEQA pursuant to California Code of Regulations, title 14, section 15333. If the Regional Water Board determines

that implementation of any plan required by this Order will have a significant effect on the environment that is not otherwise exempt from CEQA, the Regional Water Board will conduct the necessary and appropriate environmental review prior to approval of the applicable plan. The Discharger will bear the costs, including the Regional Water Board's costs, of determining whether implementation of any plan required by this Order will have a significant effect on the environment and, if so, in preparing and handling any documents necessary for environmental review. If necessary, the Discharger and a consultant acceptable to the Regional Water Board shall enter into a memorandum of understanding with the Regional Water Board regarding such costs prior to undertaking any environmental review.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13304 and 13267, Jennifer Nielsen (Discharger) shall clean up and abate the impacts to water quality in accordance with the scope and schedule set forth below and provide the following information. The Discharger shall obtain all necessary permits for the activities required in this Order.

1. **By August 15, 2015**, the Discharger shall provide a proposed **Restoration, Mitigation, and Monitoring Plan** (hereafter "RMMP") to remove the unstable dam and restore streams. The RMMP shall include but not be limited to:

    a. An assessment of the impacts to the unnamed tributaries to Dairy Creek from the unauthorized activities to be completed by the appropriate qualified professional, and must at a minimum address channel hydrology, dam construction, bank erosion, riparian habitat and loss thereof, channel and hillslope stability (e.g., stability of the slope below the four small greenhouses), locations where fill material has been placed or discharged (e.g., assess all stream crossings and roads on the Site for active or potential erosion and adequate/proper sizing and installation of culverts to carry the 100-year predicted flow and debris), and road and greenhouse pad and other graded areas surface drainage. The assessment shall include aerial photographs and/or satellite images, photographs, reports, topographic maps, or drawings etc., of Site conditions prior to conducting the un-permitted activities, and include a detailed Site map of existing features accurately depicting topography, all graded surfaces, surface water courses, surface water drainages, and water crossings, instream structures, and the functional status of these features. Assessment findings shall serve as the basis for the Restoration, Mitigation, and Monitoring Plan.

    b. The RMMP shall include plans for Site restoration and proposed mitigation to restore beneficial uses by 1) removing the dam and restoring the channel to

pre-discharge conditions, 2) avoiding, minimizing and compensating for any further impacts, and, 3) compensating for any temporal loss from the time the impacts first occurred to the unnamed tributaries to Dairy Creek occurred to the time restoration becomes fully functional. The RMMP shall include designs and specifications to accomplish the following: 1) remove the dam and all illegally placed earthen material and miscellaneous debris from streams and adjacent to streams; 2) restore the vegetative and hydrological functions of the damaged streams to ensure the long term recovery of the affected streams; and 3) replant the slopes and streamside areas with native vegetation to prevent erosion and delivery to streams.

c. The RMMP must include: 1) map(s) at 1:12000 or larger scale (e.g., 1:6000) that delineate existing site conditions including existing and buried stream channels; the projected restored slopes and stream channels, illustrating all restoration plan work points; spoil disposal sites; re-vegetation planting areas; and any other factor that requires mapping or site construction details to complete the scope of work; 2) design and construction standards for: earthen material compaction, stream crossing installation and removal; dam removal; road or surface drainage controls; re-planting to ensure stabilization of exposed soils with native vegetation; and erosion control methods and standards for and contingency plan for unanticipated precipitation during restoration. The RMMP shall contain an implementation schedule, a monitoring and reporting plan, and success criteria meeting the requirements specified herein. The RMMP shall incorporate use of appropriate native species in all re-vegetation efforts.

d. To ensure a successful re-vegetation/earthen stabilization effort, site restoration and mitigation, the Discharger shall annually monitor and report for five years. All tree and shrub plantings shall have a minimum of 85% success of thriving growth at the end of five years with a minimum of two consecutive years (two growing seasons) of monitoring after the removal of irrigation. Planting shall be adequately spaced to ensure adequate vegetative cover to control surface erosion and increase soil stability. In the event the re-planting fails, re-planting is required and the monitoring shall be extended for another five years until the 85% success rate of vegetation re-establishment is accomplished. The Discharger is responsible for replacement planting, additional watering, weeding, invasive/exotic eradication, or any other practice to achieve the success criteria.

e. The RMMP must include a time schedule for completing the work including receiving any necessary permits from State, County and/or federal agencies that may be required. The time schedule must adhere to the deadlines for completion stipulated in this Order.

f. A monitoring plan is required for all site restoration and replanting to determine the success of stream restoration efforts and revegetation. The monitoring plan must include regularly scheduled inspections, and established monitoring photo points of sufficient number to document the site recovery for five years or until the Site is restored, mitigation is complete, vegetation is reestablished, erosion is no longer ongoing and monitoring is no longer necessary. These photo-documentation points shall be selected to document the stability of the tributaries. The Discharger shall prepare a site map with the photo-documentation points clearly marked. Prior to and immediately after implementing the restoration and/or mitigation, the Discharger shall photographically document the pre- and post-conditions of the tributaries at the pre-selected photo-documentation points. The Applicant shall submit the pre-restoration photographs, the post-restoration photographs, and the map with the locations of the photo-documentation points to the Regional Water Board as part of the as-built report as defined below in Directive 4.

g. The monitoring plan must include regularly scheduled inspection dates. We recommend October 15, January 5, and March 1 of each year. A monitoring report is required within 30 days of each inspection. Monitoring Reports shall summarize monitoring results; describe any corrective actions made or proposed to address any failures of the Site and restoration measures (features to be assessed for performance and potential failure include, but are not limited to, erosion controls, stream bed and bank erosion, sediment discharges, work, and re-vegetation); and include narrative and photo documentation of any necessary mitigation and evidence of successful restoration and Site recovery for five years, or until Site recovery is considered complete. At the conclusion of restoration work, when the site is stable and the monitoring program has been fulfilled, submit a Summary report by January 1, 2020, or by January 1 of the year that site remediation and replanting is determined to be stable. The Assistant Executive Officer or designee will review the report and determine if the site meets expectations and the Order can be terminated.

2. Progress reports are due the first of each month starting on **August 1, 2015**. Progress reports should include an update on project development and permitting, a description of steps taken to develop and implement the required plans, and any unforeseen circumstances that may affect progress on meeting the deadlines and requirements of this Order. Progress reports will continue until the construction of the RMMP is completed.

3. **By October 15, 2015,** complete all approved restoration and mitigation measures described in the proposed RMMP**.**

4. **By January 1, 2016**, submit a **Completion Report** for the Restoration, Mitigation, and Monitoring Plan including an as built report. The Completion Report shall accurately depict all restoration and/or mitigation measures and document that the

above plan to restore, compensate for, avoid and minimize any further impacts to the unnamed tributaries and Dairy Creek has been fully implemented.

GENERAL REQUIREMENTS AND NOTICES

5. **Duty to Use Qualified Professionals:** The Discharger shall provide documentation that plans, and reports required under this Order are prepared under the direction of appropriately qualified professionals. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. The Discharger shall include a statement of qualification and registration numbers, if applicable, of the responsible lead professionals in all plans and reports required under this Order. The lead professional shall sign and affix their registration stamp, as applicable, to the report, plan, or document.

6. **Signatory Requirements:** All technical reports submitted by the Discharger shall include a cover letter signed by the Discharger, or a duly authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to his or her knowledge, the report is true, complete, and accurate. The Discharger shall also state if he or she agrees with any recommendations/proposals and whether he or she approves implementation of said proposals. Any person signing a document submitted under this Order shall make the following certification:

   I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

7. **Notice of Change in Ownership or Occupancy:** Report Any Changes in Ownership or Occupancy: The Discharger shall file a written report on any changes in the Site's ownership or occupancy. This report shall be filed with the Regional Water Board no later than 30 days prior to a planned change and shall reference the number of this Order.

8. **Submissions:** All monitoring reports, technical reports or notices required under this Order shall be submitted to: the Assistant Executive Officer and Stormer Feiler:

   Assistant Executive Officer - Shin-Roei Lee
   Shin-Roei.Lee@waterboards.ca.gov

Stormer.Feiler@waterboards.ca.gov

By mail to: NCRWQCB, 5550 Skylane Blvd. Suite A, Santa Rosa, CA 95403

9. **Other Regulatory Requirements:** The Discharger shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning the work.

10. **Cost Recovery:** Pursuant to Water Code section 13304, the Regional Water Board is entitled to, and may seek reimbursement for, all reasonable costs it actually incurs to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

11. **Delayed Compliance:** If for any reason, the Discharger is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Assistant Executive Officer, the Discharger may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as a delay is recognized and prior to the compliance date. An extension may be granted by revision of this Order or by a letter from the Assistant Executive Officer.

12. **Potential Liability:** If the Discharger fails to comply with the requirements of this Order, this matter may be referred to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of an administrative civil liability up to $10,000 per violation per day, pursuant to California Water Code sections 13268, 13350, and/or 13385. The Regional Water Board reserves its right to take any enforcement actions authorized by law, including but not limited to, violation of the terms and condition of this Order.

13. **No Limitation of Water Board Authority.** This Order in no way limits the authority of the Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup of the Site consistent with the Water Code. This Order may be revised as additional information becomes available.

14. **Modifications.** Any modification to this Order shall be in writing and approved by the Executive Officer of the Regional Water Board, including any potential extension requests.

15. **Requesting Review by the State Water Board:** Any person aggrieved by this or any final action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and Title 23,

California Code of Regulations, section 2050 et al. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

This Order is effective upon the date of signature.

for Shin-Roei Lee

Digitally signed by Shin-Roei Lee
Date: 2015.07.06 15:16:33 -07'00'

Water Boards

Matthias St. John
Executive Officer

July 6, 2015

15-0048_CEU_Nielsen_CAO

Attachment: July 8, 2014 Inspection Report

Warrant Inspection Report
Humboldt County Sheriff's Office (HCSO) Warrant
HCSO CASE #201403092
Parcels Owned by
Jennifer Nielsen, WDID No. 1B14099CNHU
and Robert Gordon, WDID No. 1B141123CNHU
Humboldt County

Date:	October 20, 2014
To:	Diana Henrioulle – Senior Water Resource Control Engineer Shin-Roei Lee – Supervising Water Resource Control Engineer Yvonne West - Staff Counsel, SWRCB Office of Enforcement
From:	Stormer Feiler, Environmental Scientist
Inspection Date and Time:	July 8, 2014, 0834 -1004 hours, not including travel time.
Physical Site:	About 21 miles east of Bridgeville, North Northwest of Swayback Ridge, in center of Section 35, Township 1 North, Range 5 East, Humboldt Meridian
APN:	Humboldt County Assessor's Parcel Numbers 210-141-019 and 210-141-011
Landowner: Mailing Address:	Robert Gordon (North Parcel, APN 210-141-019) P.O. Box 416, Carlotta CA 95528-0416
Landowner: Mailing Address:	Jennifer Nielsen (South Parcel, APN 210-141-011) 143 Fair Oaks Street, San Francisco, CA 94110
Watershed:	Van Duzen River, Little Van Duzen River, Dairy Creek

Site Representatives: None present

Violations:	California Water Code, Clean Water Act

Inspection Attendance

Stormer Feiler- North Coast Regional Water Quality Control Board
J. Mowery- Lead for this case with Humboldt County Sheriff's Office (HCSO)
HCSO Search Warrant Team

Introduction

On July 8, 2014, I participated in an inspection of the subject properties, under a search warrant served by J. Mowery of the Humboldt County Sheriff's Office, and Officer Mowery's team. The warrant applied to two parcels referred to herein as the North parcel and South parcel; according to County assessor records, the North parcel (APN 210-141-019) is owned by Robert Gordon, and the South parcel (APN 210-141-011) is owned by Jennifer Nielsen. Neither landowner was present during the inspection.

As shown in Image 1, below, both parcels are rectangular, sharing a property line between the North parcel and South parcel. Both parcels have been developed and each had active marijuana cultivation areas at the time of the inspection. Access roads on each parcel meet at a large greenhouse located on or near the shared property line, indicating that the activities on both parcels may be part of a single or coordinated operation.

On the North parcel, (APN 210-141-019) I observed an outdoor garden, 4 large water bladders, one empty, the others full or partially filled with water, and evidence of water diversion from Dairy Creek to the water bladders, through the use of a gasoline-powered pump.

On the South parcel, (APN 210-141-011), I observed evidence of road grading, hillslope excavation to construct earthen fill terraces, instream excavation, and an instream earthen dam forming a pond, all of which appeared relatively recent. I also observed that the instream work had affected three streams: a Class II[1], and two Class III streams,[2] one of which had potential Class II habitat indicators. In addition to the large greenhouse on or near the shared property line, I observed a small shed with containers of chemicals including fertilizers, pesticides, and petroleum products placed inside, outside, and underneath the shed, and four greenhouses on an excavated fill terrace. There is also a cabin structure on this parcel, which according to the HCSO was completely changed over to a drying facility for marijuana.

[1] California Forest Practice Rules define a Class II watercourse as 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present. The definition excludes Class III watercourses from the exception.

[2] California Forest Practice Rules define a Class III watercourse as a watercourse with no aquatic life present, and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions after completion of timber operations.

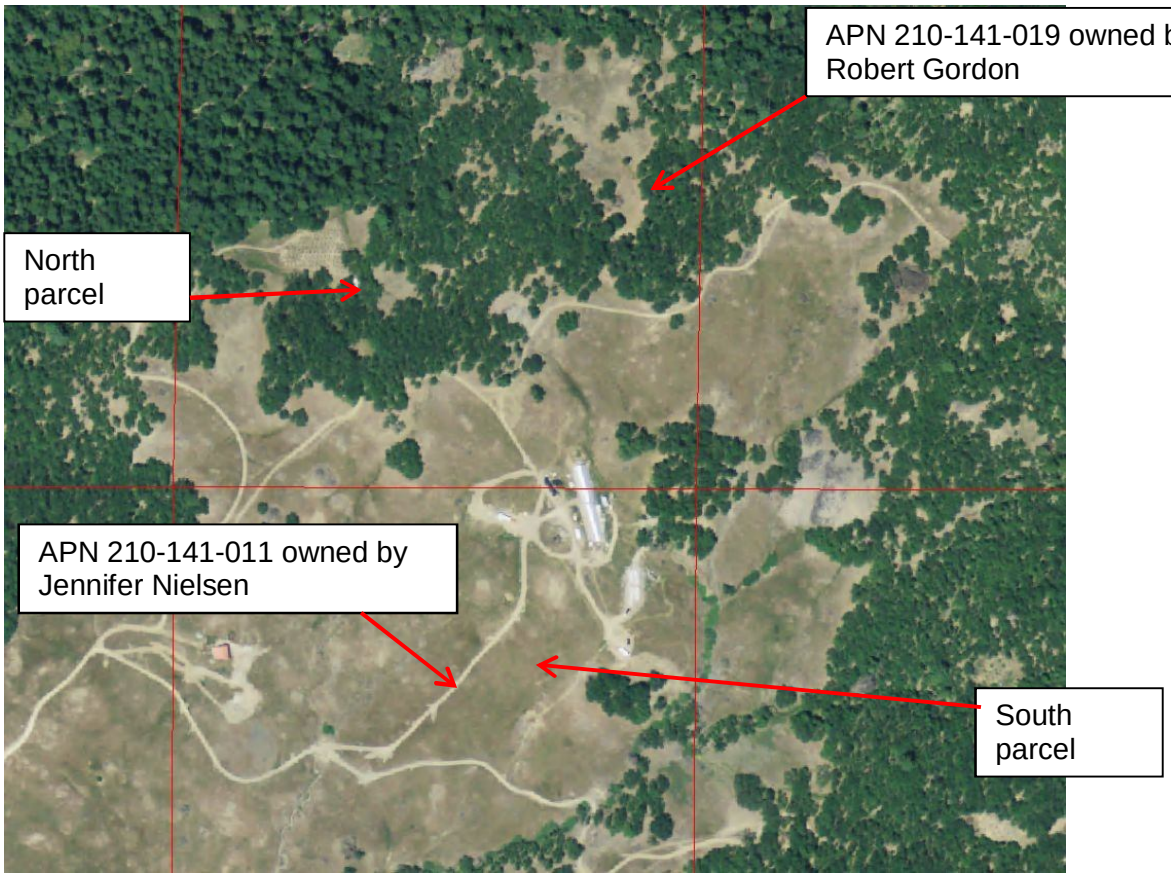

Image 1: Overview of both parcels showing the shared property line and a number of the features discussed in the observations section below. The image is on a north-south orientation. (Note that this image shows that the parcel boundary line transects the large greenhouse in the center of the image; this may or may not correctly depict the location of the property line, as there is sometimes variation in the parcel layer.) (Image Source NAIP 2012)

Watershed and Beneficial Use Information

The site is located within the Dairy Creek Cal Water watershed 1111.220401 (Cal water version 2.2) within the Van Duzen River watershed area. The affected streams are Dairy Creek, and its tributaries, which are all tributary to the Little Van Duzen River, also referred to as the South Fork Van Duzen River, in the Bridgeville Hydrologic Subarea of the Van Duzen River Hydrologic Area, in the Eel River watershed. This area is located within the boundaries for the California Coastal Evolutionarily Significant Unit (ESU) for Chinook Salmon, the Northern California Distinct Population Segment (DPS) for Steelhead trout, and the Southern Oregon/Northern California Coast ESU for Coho salmon, as designated by the National Oceanic and Atmospheric Administration in cooperation with the U.S. Fish and Wildlife Service and Environmental Protection Agency. All these populations have been listed as threatened under the state and federal Endangered Species Act.

The properties discussed herein are tributary to Dairy Creek, which is a Class I[3] stream and provides habitat for salmonids.

The Van Duzen River and its tributaries are federal Clean Water Act section 303(d)-listed as impaired due to sediment. In December 1999, the U.S. Environmental Protection Agency (USEPA) approved a total maximum daily load (TMDL) for sediment in the Van Duzen River watershed. The TMDL generally emphasized the importance of controlling and reducing the amount of sediment delivery into the watershed in order to protect the "primary beneficial use of concern," in the watershed, salmon and steelhead habitat.

The April 8, 2008 Regional Water Board Staff Work Plan to Control Excess Sediment in Sediment-Impaired Watersheds, approved by the Regional Water Board on June 12, 2008, indicates in part that staff will "Identify most egregious sources of excess sediment and highest priority sites using aerial and road-based reconnaissance, complaints, staff observations, general knowledge, and other information," with a focus on subwatersheds of the Van Duzen River including the Little Van Duzen River, and to use progressive enforcement or develop Waste Discharge Requirements or Conditional Waivers to direct control of excess sediment.

The watershed supports numerous beneficial uses, as designated and defined in the Water Quality Control Plan for the North Coast Region (Basin Plan). Some of those beneficial uses are more sensitive than others, such as the fisheries discussed earlier. In addition to providing habitat for rare and endangered species, the watershed supports a number of other existing and potential designated beneficial uses of water, including Municipal and Domestic Supply; Agricultural Supply; Industrial Process and Industrial Service Supply; Groundwater Recharge; Freshwater Replenishment; Navigation; Hydropower Generation; Water Contact and Non-Contact Water Recreation; Commercial and Sport Fishing; Cold Freshwater Habitat; Warm Freshwater Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Wildlife Habitat, and Aquaculture.

Inspection Observations

I inspected portions of each parcel, targeting areas and features that appeared to have the highest likelihood of causing a discharge or to be impacting water quality or water resources. As noted above, the large greenhouse depicted in Image 1 appears to be located on the shared property line of the two parcels and may be an operation shared by both property owners/occupants; however, most of the greenhouse, as well as the supporting infrastructure (e.g., irrigation features, chemical storage) is located on the South Parcel, so I report my observations related to the large greenhouse in my discussion below about observations made on the South parcel.

[3] California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source.

Because each parcel is owned by a different individual and it is unknown at this time whether or how operations on each parcel may relate to those on the other parcel, I discuss my observations on each property separately, below.

North Parcel: APN: 210-141-019 Robert Gordon Property

On this parcel, I observed an outdoor cultivation area with approximately 50-75 marijuana plants, 4 approximately 10,000-gallon water bladders/aqua dams, and a 2,500 gallon water tank (refer to Image 2, below, for approximate location of these features). Two of the water bladders were full, one partially full, and one empty; I estimate approximately 27,500 gallons of water were stored in the bladders and tank at the time of the inspection. The cultivation area was on a slope ranging from 3% - 25%.

Dairy Creek crosses the parcel approximately 500 feet away from this cultivation area, closer than it appears on the aerial images, and appears to be a water source for irrigation at this location. One of the law enforcement officers participating in the inspection showed me the location adjacent to Dairy Creek where law enforcement officers had removed a gasoline-powered pump just prior to my visit to the site. (Refer to Image 5, below). I observed a gas can at this location, a pipe that had reportedly been connected to the pump, and wet and discolored soils on the ground below the end of the pipe, where the pump had reportedly been sitting. The officer advised me that the pipe led to the water bladders and tank. I did not observe any fuel spill containment or cleanup materials or features at the site where the pump had been placed. Dairy Creek was dry at the time of my inspection.

The manner and method of water diversion and storage at this location may be a violation of the Water Code and Fish and Game Code.

After looking at the pump location, I drove a short distance along the access road, to find a place to turn around. As I drove, I observed an abandoned truck and derelict mobile home on this road, near the channel of Dairy Creek.

My inspection of this parcel was not exhaustive. Upon returning to the office I reviewed Google Earth imagery, and noted what appears to be an additional cannabis cultivation area and additional roads on portions of the parcel that I did not visit while in the field. However, those roads that I did travel and observe in the vicinity of Dairy Creek while on the inspection generally appeared to be poorly sited and constructed, with wet ford stream crossings and several locations where it was apparent runoff from roads had entered streams and where it appeared likely that runoff from roads will enter and deliver sediment to Dairy Creek during rainfall events.

South Parcel, APN 210-141-011, Jennifer Nielsen Property

Site Overview

The South parcel is the more extensively developed of the two parcels. As noted above, I observed evidence of extensive grading and instream excavation associated with an instream dam, roads, and a terrace. In addition to the large

greenhouse, containing over 500 marijuana plants, there were four smaller greenhouses arranged side by side on a graded terrace, a small shed near the large greenhouse, various containers of chemicals stored inside, underneath, and outside of the shed, an instream pond, and plastic sheeting in and adjacent to a Class II/III stream upstream of the pond. In reviewing historical and current aerial and satellite imagery of the site following the inspection, it appears that all development on both this and the North parcel occurred after July 2012. I observed that the South parcel terrain generally ranges from 40% to 60% slopes. Surface waters on this parcel include two Class III streams, one with Class II habitat indicators that join to form a third Class II stream.

Instream Pond and Streams

Downslope, east of the large greenhouse, is the recently constructed pond that intercepts and is constructed in the channels and at the confluence of the two Class III streams and the resulting Class II stream. The westerly of the two Class III streams flows through a meadow, and in the stream channel above the pond, harbors a small population of juncus, which often grows in wet areas indicating surface water for long enough each year to encourage growth, and potentially provide some seasonal Class II habitat to pacific tree frogs, and macro-invertebrates. The pond appeared to have been constructed by excavating material at and around the confluence of the three streams, and placement of a portion of the material downstream of the confluence in the channel of the Class II stream to serve as a dam. The dam appeared to have been constructed of loose unconsolidated native earthen fills placed in the stream channel around trees that were likely alive at the time of dam construction, but appeared to have died as a result of the soil placement and/or or impounded water. Placing earthen materials around tree trunks does not allow for adequate compaction of the materials and generally results in the rotting of the bark and cambium layer within the trees, leading to the death of the trees.

I observed additional loose fill piled adjacent to the pond, in locations where winter rainfall is likely to result in delivery of sediment to the pond and beyond it into the Class II stream channel below. I observed goldfish in the pond.

In my opinion, the earthen dam is unstable and likely to fail. Failure of the dam would result in a substantial sediment discharge and the release of a nonnative species into the Van Duzen River watershed. As discussed below, I gathered measurements while in the field, and following the inspection, calculated an estimated volume of fill material comprising the dam and available to be transported downstream in the event of a catastrophic failure.

Large Greenhouse

The larger greenhouse is constructed on a cut and fill terrace on a 20-30% slope leading directly without flattening to the Class II stream below, with drainage patterns indicating that runoff from this area enters the pond and the Class II stream channel below the pond. This greenhouse is sited approximately 30 feet away from the nearest of the two Class III streams that flow to the pond. I estimate that the greenhouse is approximately 5320 square feet, situated on an approximately 6700

square foot earthen pad. It appears that runoff from this area drains delivers to streams by towards the Class III stream and pond or towards a drainage ditch that runs along the slope on the southwest side of the greenhouse and discharges to the class II stream below the pond. I also observed evidence of rill erosion and sediment delivery to the Class II stream and pond, and evidence of gully formation caused by the drainage ditch runoff from the greenhouse on the slope below the pond and greenhouse. In reviewing Google Earth imagery following the inspection, I observed evidence that gullies had formed and sediment had discharged to the Class II stream below the pond, in 2013.

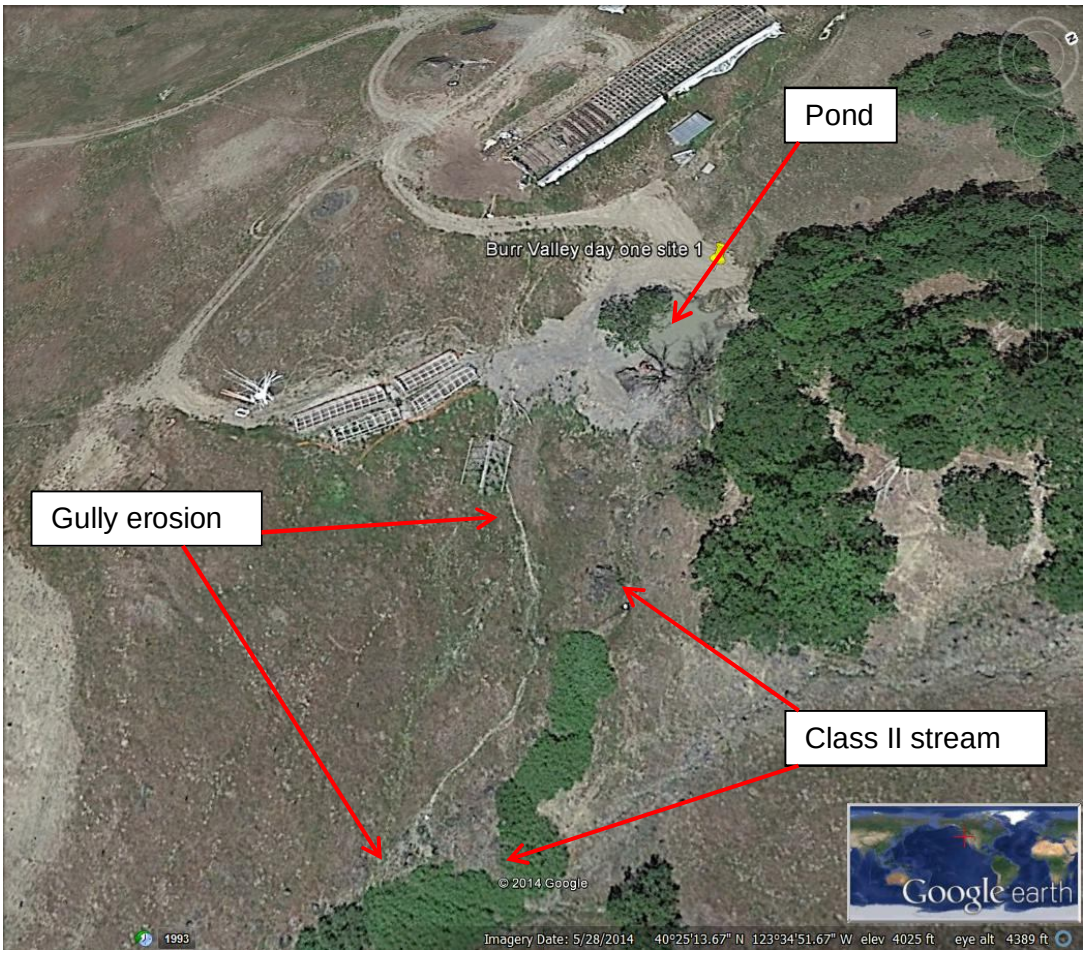

Image 2- Google Earth image of Site 1. Note the gully running to the Class II stream from the greenhouse and developed road.

As noted above, I observed plastic sheeting adjacent to and in the channel of the Class II/III stream downslope of the greenhouse.

Four Small Greenhouses

Southwest of the pond is a terrace with four small greenhouses, arranged side by side. The terrace appears to be constructed of earthen material cut from the slope, with some material sidecast downslope, and the entire area worked to construct a flat earthen pad. The terrace is located on a 30% - 40% slope, approximately 200

feet upslope of the Class II stream. As the slope gets closer to the Class II stream below, the slope increases to approximately 50%+. I observed that the slope was vegetated with grasses, and consisted of hummocky ground with several old small surficial failures. I observed that the pad had been shaped to drain centrally to a drainage ditch at the center of the pad, which drains to slopes that lead directly to the Class II stream below. In addition to increasing the chance for forming erosional gullies and transporting sediment and other pollutants directly to the downslope watercourse, concentrating the flows on this slope may exacerbate unstable slope conditions and lead to slope failures and potential sediment delivery to the watercourse.

I observed bright green liquid, likely water with algae, in low spots at the bottom of the drainage ditch, but could not confirm a water source. I observed a garden hose that had been run to this site from the water tanks in place on the slope above the large greenhouse.

Weather has been relatively mild over the winters since this site was developed. Given the site drainage characteristics, constructed drainage features, and erosional indicators I observed during this inspection, it appears that, if left uncorrected, conditions at this site could result in significant sediment discharges to receiving waters over subsequent rainy events or more normal winter weather patterns. Where runoff flows may include pollutants from the cultivation and chemical storage areas (such as fertilizers, pesticides, or soil amendments), improvements or corrections made to drainage patterns or features on the site should ensure that those cultivation-related pollutants are not conveyed to receiving waters, either through the addition/implementation of best management practices to prevent pollutants from coming into contact with stormwater runoff, or by directing runoff flows to areas where they will not enter receiving waters.

Dam Volume

Following the inspection, I used measurements that I had taken in the field, further verified with Google Maps Distance Calculator[4], and estimated the following volumes of earthen material in the fill comprising the dam. As constructed, the dam consists of two segments of earthen fill in the Class II stream channel on either side of a small group of trees. Accordingly, I measured each segment separately, and, as presented below, performed my calculations on each of the two sets of measurements separately.

Segment 1 - Fill along east side of pond:

Based on my observations, the fill comprising this segment has the highest failure potential[5], and would result in direct delivery of sediment to receiving waters.

[4] http://www.daftlogic.com/projects-google-maps-distance-calculator.htm

[5] This segment of dam, exposed to overflow from culvert spill way, is constructed within the existing Class II stream channel, and includes a portion of the earthen material that has been placed around standing trees with little or no compaction.

Length of fill segment: 21 feet
Width of fill segment: Top 5 feet, base 10 feet'
Depth of fill segment: 8-10 feet

Approximate volume of Fill Segment 1:
21' x (5' + 10'/2) x (8 + 10 /2) =
21' x 7.5' x 9' =1417.5 ft^3/27 ft^3 = 52.5 yds^3 x 201.974 =10,603.63 gallons

If this fill segment were to fail catastrophically, I estimate 70% of this volume could be delivered to downstream watercourses. A portion of the calculated volume includes the standing trees. It should be noted that a portion of the fill material used to construct this segment has been placed directly into the approximately 4-foot wide Class II stream channel so represents a volume of material that has been placed in a water of the State, while the remainder of the material in this segment represents material placed where it may enter a water of the State.

Segment 2 - Fill along the south-southeast side of the pond:

This portion of the dam consists of loose earthen fills placed on a steep slope, and exposed to rainfall and saturation by the pond. Based on my observations, I believe that the potential for failure at this location is above moderate to high.

Length of fill segment: 27 feet
Width of fill segment: Top 5 feet; Base 10 feet.
Depth of fill segment: 8-10 feet

Approximate volume of Fill Segment 2:
27' x 7.5' x 9' = 1822.5 ft^3/27 ft^3 = 67.5 yds^3 x 201.974 = 13,633.245 gallons

If this fill segment were to fail catastrophically, I estimate 50% of this volume could be delivered to downstream watercourses.

In summary, impacts and threatened impacts to water quality and water resources observed on this parcel include the unstable fills located in and adjacent to stream channels, excavated stream channels, concentrated runoff from the greenhouses, terraces, and roads, and potential transport of pollutants in runoff from the greenhouses or the chemical storage area. Containerized chemicals stored outside of the shed may spill or leak and be transported or migrate into receiving waters. Plastic sheeting, trash, and empty containers should not be stored in stream channels or in locations where they can be blown or carried into surface waters.

Site Imagery and Inspection Photographs

I took the photos provided below on the date of the inspection, with the exception of aerial images which are sourced from National Aerial Imagery Program files through a Geographical Information System. The inspection photograph section starts with

an aerial overview to identify Sites 1 and 2, as discussed above and to provide context for the locations of images provided below.

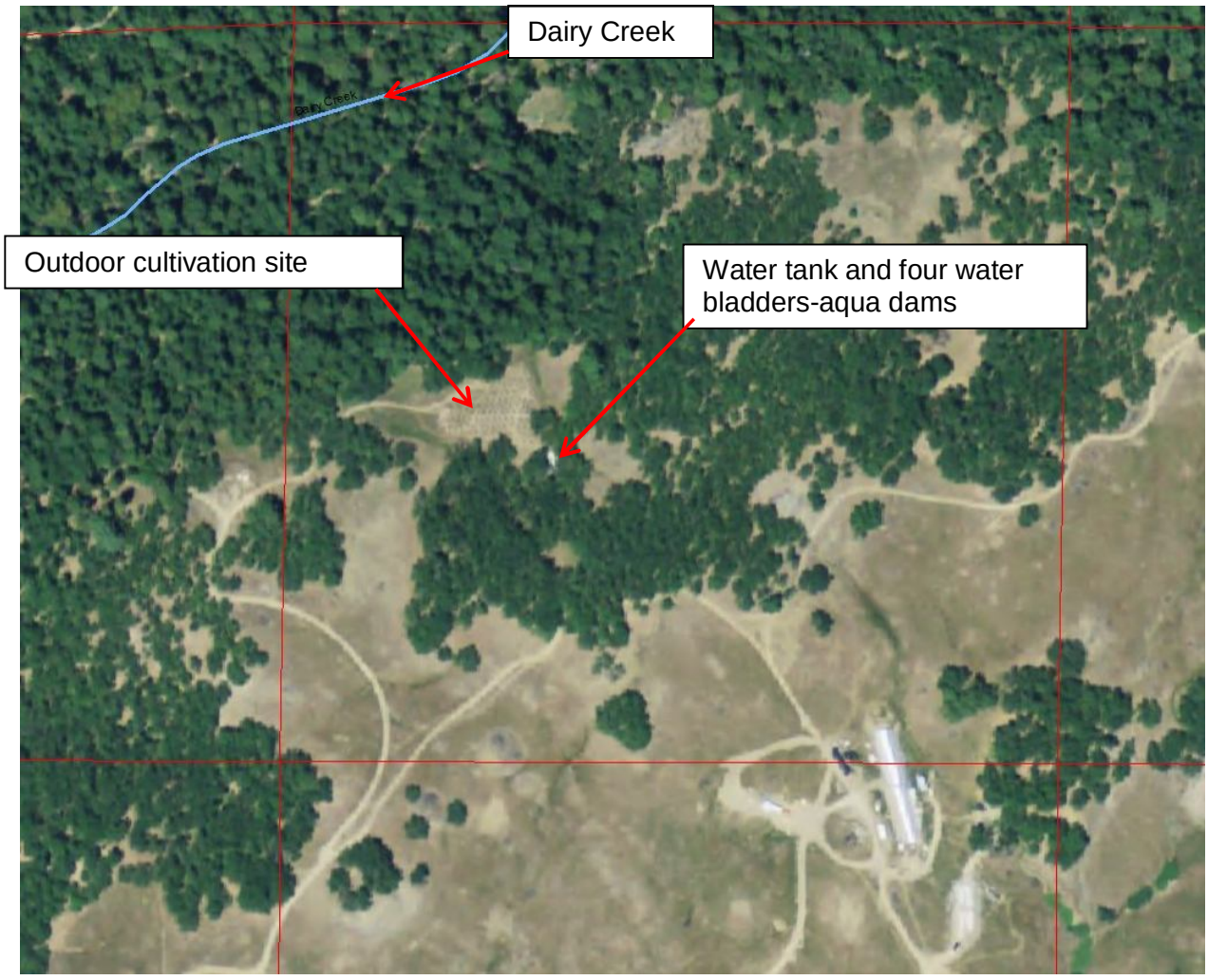

Image 3- North parcel, APN 210-141-019, Robert Gordon Property. The blue line stream denotes the approximate location of Dairy Creek, according to the GIS stream layer. (Image source NAIP 2012)

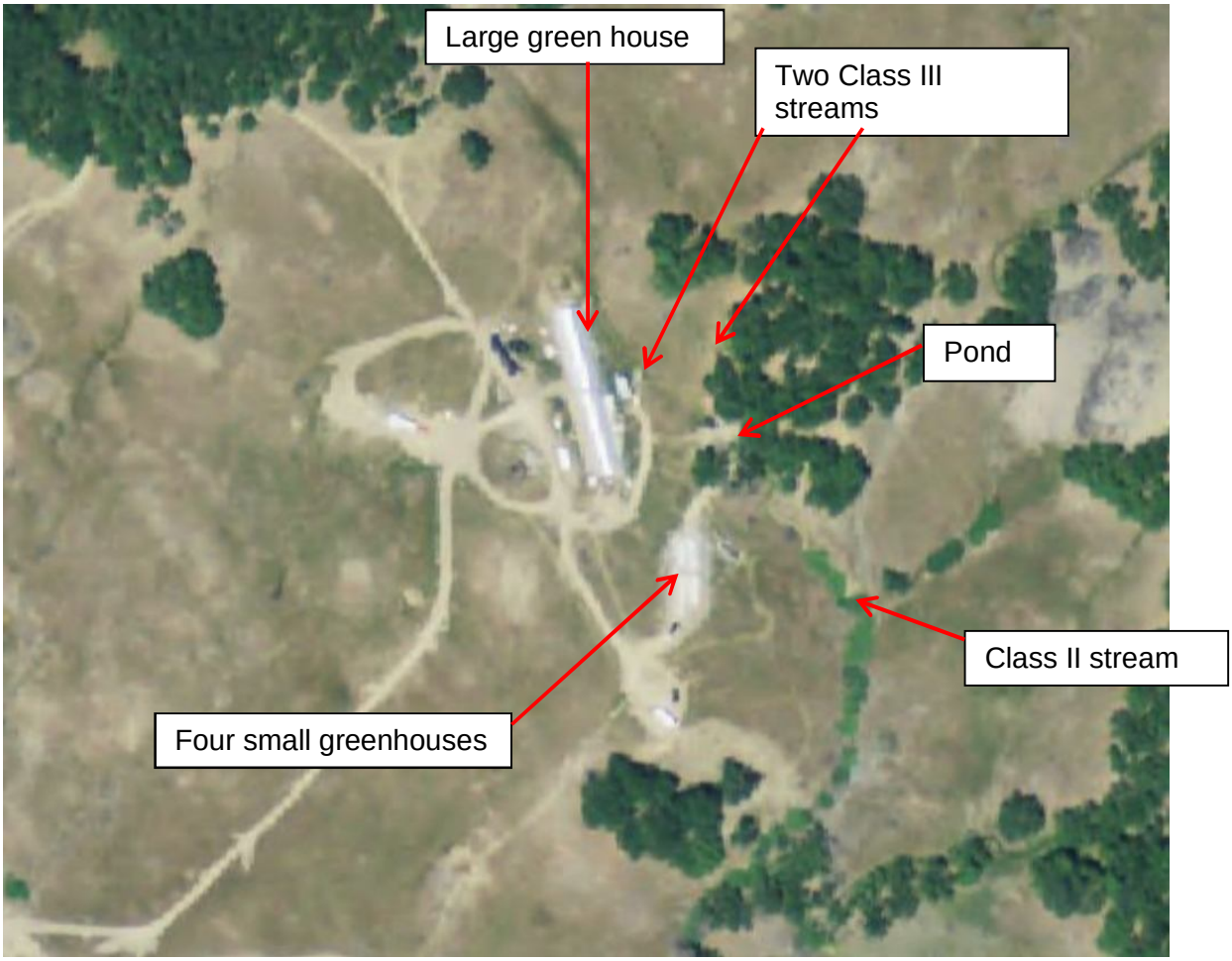

Image 4- South Parcel, APN 210-141-011, Jennifer Nielsen Property where one large, and four smaller greenhouses, and an instream pond are located. (Image Source NAIP 2012)

North Parcel, APN 210-141-019, Robert Gordon Property inspection photographs

Image 5- shows the outdoor cultivation area with at least 50 plants (Photo 7001)

Image 6 – shows the site of apparent water diversion from Dairy Creek. (Photo 7003)

Image 7 – Water bladders and water tank (Photo 6998)

South Parcel, APN 210-141-011, Jennifer Nielsen Property

Image 8 – is looking south at the large greenhouse and the pond (Photo 6994 cropped and enlarged)

Image 9 – is looking south at the pond, earthen dam, dead trees, and two Class III streams entering the pond. (Note the perched earthen fill materials piled adjacent to the pond). (Photo 6948 cropped)

Image 10 – shows the pond, spillway, culvert, and dam. Note the trees are buried in the fill. (Photo 6963 cropped and zoomed in)

Image 11- shows perched earthen fill materials above the pond, (Photo 6960)

Image 12 – shows perched earthen fill materials adjacent to and deposited in the streams entering the pond. (Photo 6951)

Image 13 – shoes the pond spillway culvert. Note the pipe is installed at a steep angle. This is not an orthodox installation, and appears to threaten the dam with overtopping and eroding during heavy rainfall.
(Photo 6959)

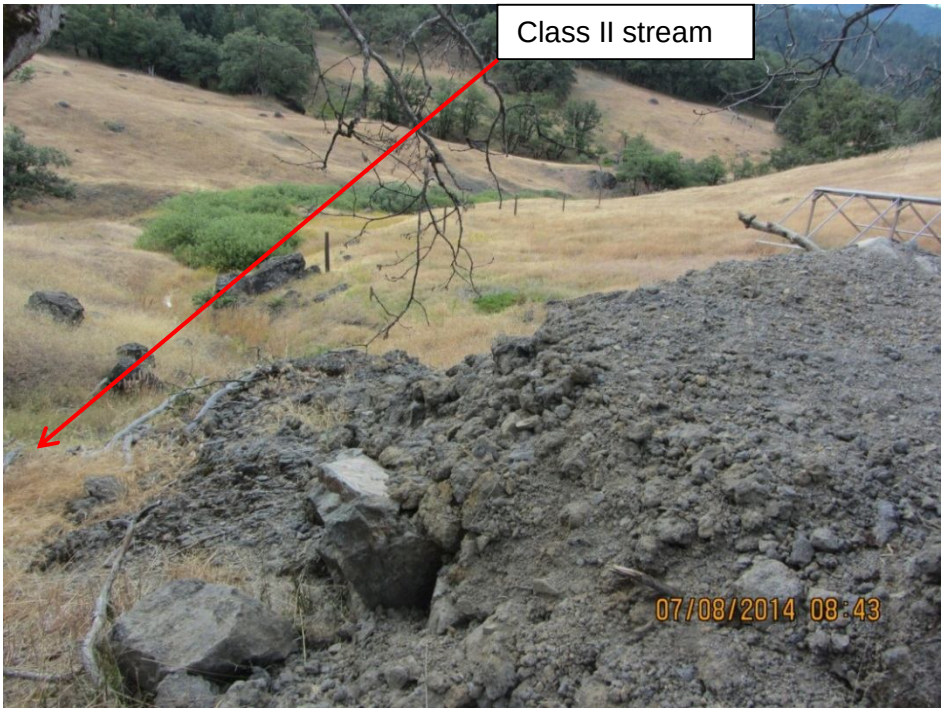

Image 14 – shows the downhill side of the dam, note the loose unconsolidated fill material used in dam construction perched adjacent to and placed in the Class II stream channel. (Photo 6955)

Image 15 – shows the four small greenhouses (photo 6992 and 6993 merged)

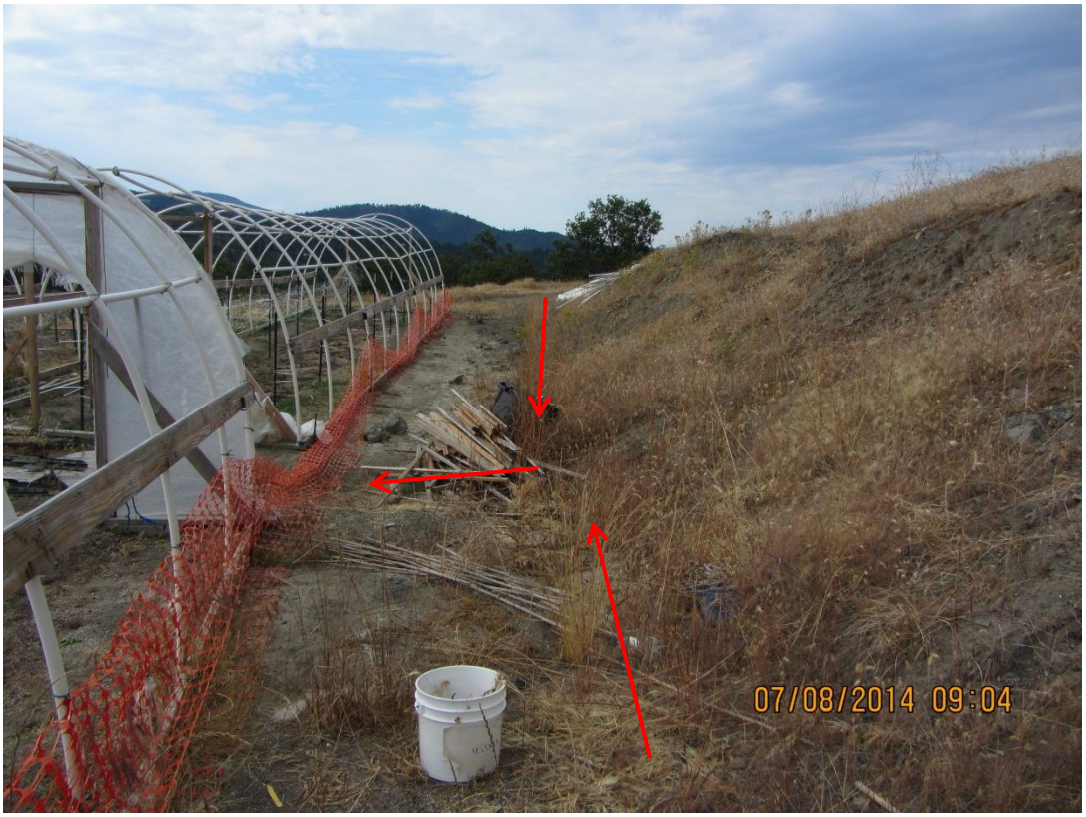

Image 16 – The arrows denote the constructed ditch drainage behind the four small greenhouses; the drainage is designed to carry all flows to the center of the greenhouses where it is then directed to the Class II stream below. This design concentrates flows, and may concentrate nutrients from the grow site potentially delivering these nutrients to the stream down slope. (Photo 6986)

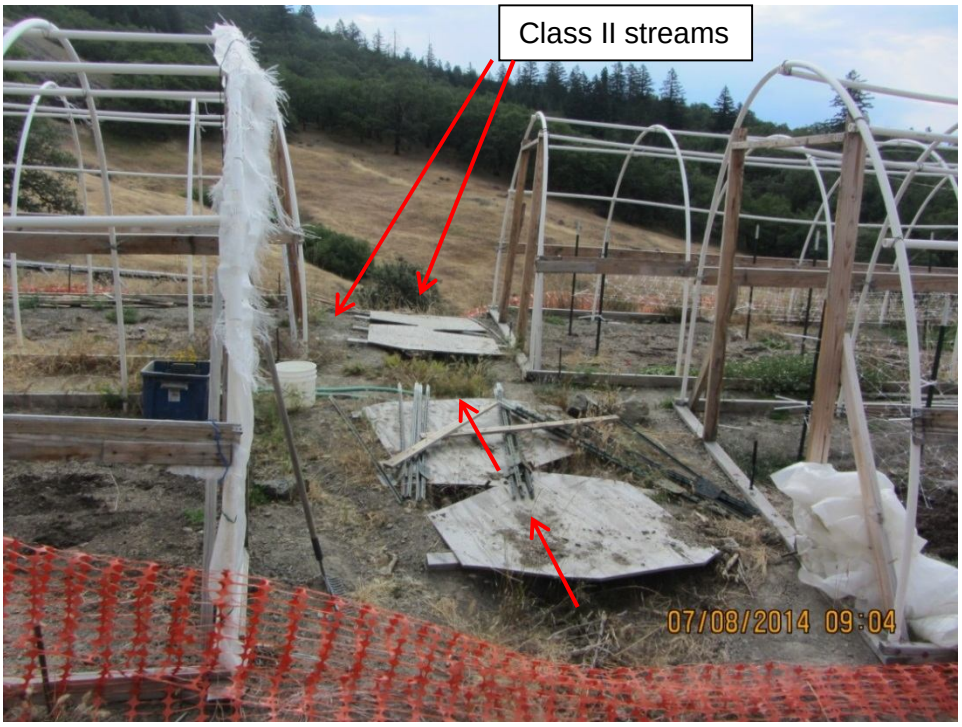

Image 17 – shows the drainage ditch between the four small greenhouses; the arrows denote the flow path of the ditch. (photo 6987)

Image 18 – Here the drainage ditch outlets onto the slope below.

Image 19 – shows the four small greenhouses and the Class II stream in the background (photo 6981)

Image 20 – is looking downslope from the four greenhouses to the Class II streams, approximately 200 feet below. Note the hummocky topography, potentially indicating unstable ground. Drainage features and conveyances on the pad for the greenhouse area concentrate runoff from this area onto the slope below. (Photo 6991)

Image 21 – shows some of the pesticides, fertilizers, motor oil, and fertilizers in the shed (photo 6974)


Image 22 – shows the plastic sheeting in the stream and adjacent to the stream above the pond. (Photo 6946 cropped)

Summary

Potential water quality violations at these sites include:

1) Basin Plan – Discharges and threatened discharges of pollutants, including sediment, nutrients, pesticides, and other materials to surface waters of the Van Duzen River Hydrologic Area
2) Water Code and Clean Water Act – Discharges and threatened discharges of waste into water of the state and United States, sediment discharge from roads, pads, and other cleared areas, a lack of erosion control and pollutant control measures in cultivation areas, and dredge and fill in surface waters.

3) Construction Storm Water Permit – More than 1 acre of disturbed soil without coverage under and compliance with the statewide general storm water construction permit.
4) Water Rights - No statement of diversion and use on file with Water Rights for diversion and illegal diversion by in-channel dam construction.

ENFORCEMENT DISCRETION

The observations in this report will be assessed for violations of the California Water Code. The Regional Water Board and the State Water Board reserve the rights to take any enforcement action authorized by law.