

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**DRAFT GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES FROM IRRIGATED LANDS**

ORDER NO. R3-20XX-XXXX

February 21, 2020

ATTACHMENT C

Acronyms, Abbreviations, and Definitions

A. Acronyms and Abbreviations

ACF	Annual Compliance Form
Antidegradation Policy	State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality Waters in California
Army Corps	United States Army Corps of Engineers
Basin Plan	Water Quality Control Plan for the Central Coastal Basin
BPTC	Best Practicable Treatment or Control
CalFIRE	California Department of Forestry and Fire Protection
CalRecycle	California Department of Resources Recycling and Recovery
CCAMP	Central Coast Ambient Monitoring Program
CCC	Criterion Continuous Concentration
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEDEN	California Environmental Data Exchange Network
Central Coast Water Board	California Regional Water Quality Control Board, Central Coast Region
CIMIS	California Irrigation Management Information System
CMC	Criterion Maximum Concentration
COLD	Cold Freshwater Habitat Beneficial Use
CRAM	California Rapid Assessment Method
CWA	Clean Water Act
CWRP	Cooperative Watershed Restoration Program
DDW	State Water Board, Division of Drinking Water
DPR	Department of Pesticide Regulation
DWR	Department of Water Resources
e.g.	Latin <i>exempli gratia</i> (for example)
ELAP	Environmental Laboratory Accreditation Program
Enforcement Policy	State Water Board Water Quality Enforcement Policy
eNOI	Electronic Notice of Intent
etc.	Latin <i>et cetera</i> (and other similar things, and so forth)
Farm Plan	Farm Water Quality Management Plan
GPS	Global Positioning System
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HUC	Hydrologic Unit Code
i.e.	Latin <i>id est</i> (that is)
ILRP	Irrigated Lands Regulatory Program
INMP	Irrigation and Nutrient Management Plan
LC50	Lethal Concentration 50

LOCID	Location Identifier
MCL	Maximum Contaminant Level
mg/L	Milligrams per Liter
MRP	Monitoring and Reporting Program
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source
NPS Policy	State Water Board Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program
NTU	Nephelometric Turbidity Units
PQL	Practical Quantitation Limit
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PMP	Pesticide Management plan
QAPP	Quality Assurance Project Plan
RAMP	Riparian Area Management Plan
RipRAM	Riparian Rapid Assessment Method
RL	Reporting Limit
Road Handbook	Handbook for Forest, Ranch, and Rural Roads
ROWD	Report of Waste Discharge
SAP	Sampling and Analysis Plan
SEMP	Sediment and Erosion Management Plan
SGMA	Sustainable Groundwater Management Act
State Water Board	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TNA	Total Nitrogen Applied
µg/L	Micrograms per Liter
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WARM	Warm Freshwater Habitat Beneficial Use
Water Code	California Water Code
WBD	Watershed Boundary Dataset
WDRs	Waste Discharge Requirements

B. Definitions

The following definitions apply to Order No. R3-20xx-xxxx and its associated attachments, including the MRP. The terms are arranged in alphabetical order. All other terms not explicitly defined here for the purposes of this Order and MRP have the same definitions as prescribed by Water Code Division 7 or are explained within the Order or MRP documents.

1. 10-year, 24-hour Storm. A 10-year storm refers to rainfall totals that have a ten percent probability of occurring at that location in that year. Criteria for how much rain must fall within 24 hours to classify as a particular rain event is determined from local rainfall data.
2. 95th Percentile Storm. A percentile rainfall event represents a rainfall amount that a certain percent of all rainfall events for the period of record do not exceed. The 95th percentile rainfall event is defined as the measured rainfall depth accumulated over a 24-hour period, for the period of record, which ranks as the 95th percentile rainfall depth based on the range of all daily event occurrences during this period.
3. Access Road. An access road, when designed, constructed, and maintained, or reconstructed consistent with the Handbook for Forest, Ranch, and Rural Roads (Road Handbook¹), that implements interim and long-term erosion prevention and soil stabilization measures, is considered a Permanent Structure for the purposes of this Order.
4. Active Channel. The channel that contains the discharge where channel maintenance is most effective, sediment is actively transported and deposited, and capable of containing most flows. Active channels are located within the area bounded by bankfull stages. This active channel is commonly wetted during the rainy season and can be identified by a break in rooted vegetation or moss growth on rocks along waterbody margins. The ordinary high-water mark is sometimes given as the elevation defining the active channel.
5. Active Compost. Compost feedstock that is in the process of being rapidly decomposed and is unstable. Active compost is generating temperatures of at least 50 degrees Celsius (122 degrees Fahrenheit) during decomposition or is releasing carbon dioxide at a rate of at least 15 milligrams per gram of active compost per day, or the equivalent of oxygen uptake. This high temperature on thermophilic phase may last from several days to several weeks.
6. Adaptive Management. The process of incorporating new scientific and programmatic information into the implementation of a restoration project to ensure

¹ http://www.pacificwatershed.com/sites/default/files/roadsenglishbookapril2015b_0.pdf

the goals of the project are achieved. It promotes flexible decision-making to modify existing activities and management practices or create new activities and management practices if projects are not meeting their goals or if new circumstances arise (e.g., new scientific information). The minimum elements of an adaptive management plan include: 1) clear restoration goals and expectations, 2) a sound conceptualization of the restoration plan, 3) an effective process for learning from future management actions, and 4) explicit feedback mechanisms (e.g., monitoring) for refining and improving activities and management practices.

7. Additives. Material mixed with feedstocks or active compost in order to adjust the moisture level, carbon to nitrogen ratio, or porosity to create a favorable condition. Additives include, but are not limited to, fertilizers and urea. Additives do not include septage, biosolids, or compost feedstock.
8. Amendments. Material mixed with feedstocks or active compost in order to adjust the moisture level, carbon to nitrogen ratio, or porosity to create a favorable condition. Additives include, but are not limited to, fertilizers and urea. Additives do not include septage, biosolids, or compost feedstock.
9. Agricultural Ditch is defined as a manmade water conveyance feature on, adjacent to, or directly connected to a farm that primarily conveys irrigation and stormwater runoff originating on the farm, and/or stormwater runoff that has traveled across any part of the farm before entering the conveyance.
10. Antidegradation. The State Water Board established a policy to maintain high quality waters of the State - Resolution No. 68-16, "*Statement of Policy with Respect to Maintaining High Quality Waters in California.*" Resolution No. 68-16 requires existing high quality water to be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of water, and will not result in water quality less than that prescribed in the policies. When authorizing the discharge of waste into waters of the State, Regional Water Boards are required to comply with Resolution No. 68-16. Permits issued by the Central Coast Water Board must result in the *best practicable treatment or control* of the discharge necessary to assure pollution or nuisance will not occur and maintain the highest water quality consistent with maximum benefit to the people of the State. Resolution No. 68-16 has been approved by the USEPA to be consistent with the federal antidegradation policy.
11. Aquatic Habitat. The physical, chemical, and biological components and functions of streams and lakes, including riparian areas and wetlands and their buffer zones.
12. Aquifer. A geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs. See also uppermost aquifer.

13. Backflow Prevention. Backflow prevention devices are installed at the well or pump to prevent contamination of groundwater or surface water when fertilizers, pesticides, fumigants, or other chemicals are applied through an irrigation system. Backflow prevention devices used to comply with this Order must be those approved by USEPA, DPR, DDW, or the local public health or water agency.

14. Bankfull Stage. The point at which flow from a waterbody just begins to enter the active floodplain. Accurate measurements have been conducted on gaged streams, however, in absence of historical hydrological records there are a number of field indicators that can be used to identify bankfull stages with a great deal of accuracy: An abrupt change in the slope of the stream channel, usually from a vertical plane to a horizontal plane on top of the floodplain. The bankfull stage is usually marked by a change in vegetation, such as the change from gravel bars to forbs, herbs, or grasses. Persistent woody vegetation is usually indicative of upland terrain, but can be misleading. Erosion or scour features indicate areas just below the bankfull stage and are recognized as significant characteristics of stream dynamics. Flat depositional benches, lateral bars, or point bars usually created by lateral or downward movement of streams and can create active floodplain areas. Change in the size distribution of sediment materials at the surface from fine gravel to cobbles, from sand to gravel or even fine gravel material. It can change from fine to coarse or coarse to fine. Stain lines can indicate frequent inundation of water on rocks. Stain lines may be marked by sediment or lichens.

15. Basin Plan. The Basin Plan is the Central Coast Region's Water Quality Control Plan. The Basin Plan describes how the quality of the surface and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan includes beneficial uses, water quality objectives, and a program of implementation.

16. Beneficial Uses. The Basin Plan establishes the beneficial uses to be protected in the Central Coast Region. Beneficial uses for surface water and groundwater are divided into twenty-four standard categories identified below. The following beneficial uses have been identified in waterbodies within the Region:

Basin Plan Beneficial Uses

Agricultural supply (AGR)*	Municipal and domestic supply (MUN)*
Aquaculture (AQUA)	Migration of aquatic organisms (MIGR)
Cold freshwater habitat (COLD)	Navigation (NAV)
Commercial and sport fishing (COMM)	Non-contact recreation (REC-2)

Estuarine habitat (EST)	Preservation of biological habitats of special significance (BIOL)
Freshwater replenishment (FRSH)	Rare, threatened or endangered species (RARE)
Groundwater recharge (GWR)	Shellfish harvesting (SHELL)
Hydropower generation (POW)	Spawning, reproduction, and development (SPWN)
Industrial process supply (PROC)	Warm freshwater habitat (WARM)
Industrial service supply (IND)*	Water contact recreation (REC-1)
Inland saline water habitat (SAL)	Wildlife habitat (WILD)
Marine habitat (MAR)	

*As described in the Basin Plan, all groundwater in the central coast region, except for the Carrizo Plain groundwater basin, is designated for agricultural water supply (AGR), municipal and domestic water supply (MUN), and industrial use (IND) beneficial uses.

17. C:N Ratio. A carbon-to-nitrogen ratio (C/N ratio or C:N ratio) is a ratio of the mass of carbon to the mass of nitrogen in a substance. It is used in analyzing compost and crop residue materials. For example, a C:N of 10:1 means there is ten units of carbon for each unit of nitrogen in the substance. Since the C:N ratio of everything in and on the soil can have a significant effect on crop residue decomposition, particularly residue cover on the soil and crop nutrient cycling (predominantly nitrogen).
18. California Rapid Assessment Method (CRAM) is a rapid assessment approach and procedure approved by the California Water Quality Monitoring Council (CWQMC) and subject to peer review process of the California State Water Resources Control Board and California Environmental Protection Agency. Assessment modules are developed with oversight and guidance provided by the statewide Level 2 Committee of the California Wetland Monitoring Workgroup (CWMW). The CWMW functions as a subcommittee of the CWQMC. CRAM data collected during an assessment is uploaded to the publicly available [EcoAtlas database](#).
19. California Rapid Assessment Method (CRAM) Practitioner is an individual who has satisfactorily completed the required CRAM training program.
20. Chemigation. The application of pesticides, fertilizers, fumigants or other chemicals through an irrigation system.
21. Commercial. Irrigated lands producing commercial crops are those operations that have one or more of the following characteristics:

- a. The landowner or operator holds a current Operator Identification Number/Permit Number for pesticide use reporting;
 - b. The crop and/or its product is sold, including but not limited to (1) an industry cooperative, (2) harvest crew/company, or (3) a direct marketing location, such as Certified Farmers Markets;
 - c. The federal Department of Treasury Internal Revenue Service form 1040 Schedule F Profit or Loss from Farming is used to file federal taxes.
22. Composting. A controlled microbial degradation of organic wastes yielding a safe and nuisance-free product.
23. Composting Operation. The areas at which composting operations are conducted, including the receiving area, pre-processing, processing, curing, storage areas, detention ponds, and other areas associated with production of compost, including storage areas for feedstocks, additives, and/or amendments.
24. Concentration. The relative amount of a substance mixed with another substance. An example is 5 mg/L (milligrams per liter) of nitrogen in water or 5 ppm (parts per million).
25. Contamination. An impairment of the quality of the waters of the state by waste to a degree which causes a hazard to the public health through poisoning or through the spread of disease. Contamination includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.
26. Crop, or Specific Crop. For the purposes of this Order, examples of crops or specific crops include broccoli, lettuce, spinach, wine grapes, avocados, etc. The terms crop and specific crop do not refer to categories of crops such as vegetables, vineyards, orchards, etc.
27. Curing Compost. The final stage of the composting process that occurs after compost has undergone pathogen reduction, as defined in California Code of Regulations title 14, section 17868.3, and after most of the readily metabolized material has been decomposed and stabilized. This curing phase begins after an active compost pile endures a sustained drop in temperature as remaining materials continue to decompose, but at a much slower rate. This helps to further decompose and stabilize potentially toxic organic acids and resistant compounds. The curing process helps bring compost to full maturity and can last several months.
28. Design Storm. The storm intensity and volume that management measures such as sediment retention basins are designed to accommodate.
29. Discharge. A release of a waste to waters of the state, either directly to surface waters or through percolation to groundwater. Wastes from irrigated agriculture

include but are not limited to earthen materials (soil, silt, sand, clay, and rock), inorganic materials (metals, plastics, salts, boron, selenium, potassium, nitrogen, phosphorus, etc.) and organic materials such as pesticides. Discharges from irrigated lands regulated by this Order include discharges of waste to surface water and groundwater, such as irrigation return flows, percolation, tailwater, tile drain water, stormwater runoff flowing from irrigated lands, stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands, and runoff resulting from frost control or operational spills. These discharges can contain wastes that could affect the quality of waters of the state and impair beneficial uses.

30. Discharger. The owner or operator of irrigated lands that discharges or has the potential to discharge waste that could directly or indirectly reach waters of the State and affect the quality of any surface water or groundwater. See also Responsible Party.
31. Discharges of Waste from Irrigated Lands. Surface water and groundwater discharges, such as irrigation return flows, tailwater, drainage water, subsurface drainage generated by irrigating crop land or by installing and operating drainage systems to lower the water table below irrigated lands (tile drains), stormwater runoff flowing from irrigated lands, stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands, runoff resulting from frost control, and/or operational spills containing waste.
32. Disturbance. When natural conditions have been modified in a way that may result in waste discharge to waters of the state from the site. Disturbed areas are where natural plant growth has been removed, whether by physical, animal, or chemical means, or natural grade has been modified for any purpose. Disturbance includes all activities whatsoever associated with developing or modifying land for agricultural related activities or access. Disturbance activities include, but are not limited to, construction of roads, buildings, water storage areas; excavation, grading, and site clearing. Disturbance includes crop areas, storage areas where soil or chemicals (e.g., pesticides, fertilizers, compost, or biosolids) are located.
33. Drinking Water System. The following drinking water system definitions are taken from the California Health and Safety Code and Title 22 of the California Code of Regulations, except where otherwise noted.
 - a. Public Water System. A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

- i. Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.
 - ii. Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.
 - iii. Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.
- b. State small water system. a system for the provision of piped water to the public for human consumption that serves at least 5, but not more than 14, service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year.
- c. Community water system. A public water system which serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents.
- d. Small community water system. A community water system that serves no more than 3,300 service connections or a yearlong population of no more than 10,000 persons.
- e. Noncommunity water system. A public water system that is not a community water system.
- f. Nontransient noncommunity water system. A public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.
- g. Transient community water system. A noncommunity water system that does not regularly serve at least 25 of the same persons over 6 months per year.
- h. Private Domestic Wells and Local Small Water Systems. Neither the California Health and Safety Code nor Title 22 of the California Code of Regulations defines domestic wells or drinking water systems with two to four (2-4) service connections. The California Department of Public Health (CDPH) and various county environmental health agencies throughout the state generally define domestic wells as wells serving up to four (4) service connections. However, some local health agencies define a domestic well as serving an individual residence (single connection) and “local small (or shared) water systems” as having two to four (2–4) service connections. The State Water Resources Control Board, Groundwater Ambient Monitoring and Assessment (GAMA) Program defines an

individual well serving a single residential connection as a “private domestic well.” For the purposes of this Order, the following definitions are used:

- i. Private Domestic Wells. An individual well serving a single (1) residential connection. Also see On-Farm Domestic Well.
 - ii. Local Small Water Systems. An individual well with two to four (2-4) service connections.
34. Ecological Functions and Values (of riparian areas). Functions are onsite and offsite natural riparian habitat processes. Values are the importance of the riparian habitat to society in terms of health and safety; historical or cultural significance; ecological characteristics, education, research, or scientific significance; aesthetic significance; economic significance; or other reasons.
 35. Enrollee. A Discharger enrolled in the Agricultural Order. See also Permittee.
 36. Ephemeral Stream. A channel that holds water during and immediately after rain events.
 37. Erosion. The gradual destruction of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building, or logging.
 38. Erosion and Sediment Control Practices. Practices used to prevent and reduce the amount of soil and sediment entering surface water in order to protect or improve water quality.
 39. Environmental Justice. Providing equal and fair access to a healthy environment for communities of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies; and proactive efforts to take into account existing environmental injustices and to protect from new or additional environmental hazards and inequitable environmental burdens.
 40. Exceedance. A reading using a field instrument or a detection by a California State-certified analytical laboratory where the detected result is above an applicable water quality standard for the parameter or constituent.
 41. Farm. See Ranch.
 42. Fertigation. The application of fertilizers through an irrigation system.

43. Final Product. The compost material that has completed the curing phase. Residual substances originally present in the compost pile are consumed after proper curing. The compost has been brought to maturity, and organic acids and resistant compounds have been substantially decomposed. Final product is interchangeable also defined as “Stabilized Compost” under the CalRecycle, California Code of Regulations, Title 14, Division 7, Chapter 3.1. Compostable Materials Handling Operations and Facilities Regulatory Requirements.
44. First Flush Run-Off Event. First flush phenomena can be expected during the first storm or storms of the season. Due to the extended build-up of pollutants over a number of months without rain, overall pollution concentrations can be expected to be higher for the season's first few storms than for the rest of the season.
45. Food Material. Solid, and/or semi-solid materials resulting from the production or processing of food for animal or human consumption, but is no longer intended for such consumption, that is separated from the municipal solid waste stream. Food material includes, without limitation, food waste from food facilities (as defined in Health and Safety Code, section 113789), food processing establishments (as defined in Health and Safety Code, section 111955), grocery stores, institutional cafeterias (such as prisons, schools, and hospitals), restaurants, and residential food scrap collection. Food material may include meat and materials incidental to a food scrap collection program. Food material shall not contain any substance included in the Prohibitions section of this General Order.
46. Freshwater Habitat beneficial use of water supports cold or warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
47. Green Material. Any plant material that is separated at the point of generation and consists of, or contains, materials from plants, including leaves, clippings, cuttings, trimmings of grass, weeds, shrubbery, bushes, or trees, residential or community garden waste, and untreated wood waste. Green material does not include food material, biosolids, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.
48. Groundwater. The supply of water found beneath the Earth’s surface, usually in aquifers, which can supply wells and springs.
49. Groundwater Protection Practices. Management practices designed to reduce or eliminate transport of nitrogen, pesticides, and other waste constituents into groundwater.
50. Hoop House. A plastic-covered structure that is used to grow crops, also called a high tunnel.

51. HUC-8 and HUC-12 Watersheds. Derived from Watershed Boundary Dataset (WBD) maps developed by the U.S. Department of Agriculture, Natural Resources Conservation Service to define and compare true watersheds and hydrologic units and their applications for watershed assessment.² The WBD maps the full areal extent of surface water drainage for the United States, using a hierarchical system of nesting hydrologic units at various scales, each with an assigned hydrologic unit code (HUC). HUC-8 maps the subbasin level, analogous to medium-sized river basins. HUC-12 is a more local sub-watershed level that captures tributary systems.
52. Impermeable Surfaces. Plastic-covered surfaces that do not allow fluid to pass through, including polyethylene mulch and hoop houses. For the purposes of this Order, impermeable surface does not refer to relatively impermeable soils.
53. Infiltration Rate. Velocity or speed at which water enters the soil, determined by soil texture and soil structure.
54. Integrated Pest Management Program (IPM). A pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as encouraging biological control, use of resistant varieties, or adoption of alternative cultivating, pruning, or fertilizing practices or modification of habitat to make it incompatible with pest development. Pesticides are used only when careful field monitoring indicates they are needed according to pre-established guidelines or treatment thresholds.
55. Intermittent Stream. A stream that holds water during wet portions of the year.
56. Invasive Species. Organisms (plants, animals, or microbes) that are not native to an environment and that, once introduced, establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health.³
57. Irrigated Lands. For the purpose of this Order, irrigated lands include lands where water is applied for the purpose of producing commercial crops and include, but are not limited to, land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with soil floors, that do not have point-source type discharges, and are not currently operating under individual Waste Discharge Requirements (WDRs). Lands that are planted with commercial crops that are not yet marketable, such as vineyards and tree crops, must also obtain coverage under this Order.

² <https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/Supplemental/HUC.pdf>

³ For guidance on identifying species of concern, see the [Cal-IPC website](#).

58. Irrigation. Applying water to land areas to supply the water and nutrient needs of plants.
59. Irrigation Management Practices. Management practices designed to improve irrigation efficiency and reduce the amount of irrigation return flow or tailwater, and associated degradation or pollution of surface and groundwater caused by discharges of waste associated with irrigated lands.
60. Irrigation Runoff or Return Flow. Surface and subsurface water that leaves the field following application of irrigation water. See also Tailwater.
61. Irrigation System Distribution Uniformity. Irrigation System Distribution Uniformity is a measure of how uniformly irrigation water is applied to the cropping area, expressed as a percentage. A nonuniform distribution can deprive portions of the crop of sufficient irrigation water and can result in the excessive irrigation leading to waterlogging, plant injury, salinization, irrigation runoff and transport of chemicals to surface water and groundwater.
62. Enhancement. Manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.
63. Establishment. (Creation) Manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at the site. Establishment results in a gain of aquatic resource area and function.
64. Lake and Streambed Alteration Agreement. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:
- Substantially divert or obstruct the natural flow of any river, stream or lake;
 - Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
 - Deposit debris, waste or other materials that could pass into any river, stream or lake.
- “Any river, stream or lake” includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.
65. Landowner. An individual or entity who has legal ownership of a parcel(s) of land. For the purposes of this Order, the landowner is responsible for ensuring

compliance with this Order and for any discharge of waste occurring on or from the property.

66. Limited Resource Farmer. A Limited Resource Farmer is defined by the U.S. Department of Agriculture (USDA)⁴ as:
- a. A person with direct or indirect gross farm sales not more than the current indexed value (determined by USDA) in each of the previous 2 years, and
 - b. A person who has a total household income at or below the national poverty level for a family of four, or less than 50 percent of county median household income in each of the previous 2 years.
67. Load. The mass of a substance discharged over a given amount of time, for example 10 mg/day or 5 kg/day.
68. Manure. Excrement from animals (e.g., cattle, chicken, pig) that includes feces and urine and any bedding material, spilled feed, or soil that is mixed with feces or urine, and the accumulated material does not exceed its moisture holding capacity. Manure does not include carcasses, whole or in part.
69. Monitoring. Sampling and analysis of receiving water quality conditions, discharge water quality, aquatic habitat conditions, effectiveness of management practices, and other factors that may affect water quality conditions to determine compliance with this Order or other regulatory requirements. Monitoring includes but is not limited to: surface water or groundwater sampling, on-farm water quality monitoring undertaken in connection with agricultural activities, monitoring to identify short and long-term trends in in-stream water quality or discharges from sites, inspections of operations, management practice implementation and effectiveness monitoring, maintenance of on-site records and management practice reporting.
70. Nonpoint Source (NPS) Pollution. Diffuse pollution sources that are generally not subject to NPDES permitting. The wastes are generally carried off the land by runoff. Common nonpoint sources are activities associated with agriculture, timber harvest, certain mining, dams, and saltwater intrusion.
71. Nonpoint Source Management Measures. To combat NPS pollution, the State Water Board NPS Program adopted management measures as goals for the reduction of polluted runoff generated from five major categories, including agriculture. Management measures address the following components for irrigated agriculture: erosion and sediment control; nutrient management; pesticide management; irrigation water management; and riparian and wetland area management and protection.

⁴ The USDA's Limited Resource Farmer "Self Determination Tool" is available at: <https://lrftool.sc.egov.usda.gov/DeterminationTool.aspx?fyYear=2019>

72. Nonpoint Source Management Practices. Methods or practices selected by entities managing land and water to achieve the most effective, practical means of preventing or reducing pollution from diffuse sources, such as wastes carried off the landscape via urban runoff, excessive hill, slope or streambed and bank erosion, etc. Management practices include, but are not limited to, structural and nonstructural controls, and operation and maintenance procedures. Management practices can be applied before, during, and after pollution-causing activities to prevent, reduce, or eliminate the introduction of wastes into receiving waters.
73. Nuisance. Anything which meets all of the following requirements: 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; 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; occurs during, or as a result of, the treatment or disposal of wastes.
74. Nutrient. Any substance assimilated by living things that promotes growth.
75. Nutrient Management Practices. Management practices designed to reduce the nutrient loss from agricultural lands, which occur through edge-of-field runoff or leaching from the root zone.
76. On-Farm Domestic Well. Any groundwater well that is connected to a residence, workshop, or place of business that may be used for human consumption, cooking, or sanitary purposes that is located within the enrolled ranch Assessor Parcel Number (APN). This includes all domestic wells located within the enrolled APN, not limited to the leased property or within the ranch boundary. This definition includes “dual-use” wells that are used for both irrigation and domestic purposes.
77. Operator. Person responsible for or otherwise directing farming operations in decisions that may result in a discharge of waste to surface water or groundwater, including, but not limited to, a farm/ranch manager, lessee, or sub-lessee. The operator is responsible for ensuring compliance with this Order and for any discharge of waste occurring on or from the operation.
78. Operation. A distinct farming business, generally characterized by the form of business organization, such as a sole proprietorship, partnership, corporation, and/or cooperative. A farming operation may be associated with one to many individual farms/ranches.
79. Operational Spill. Irrigation water that is diverted from a source such as an irrigation well or river, but is discharged without being delivered to or used on an individual field.
80. Perennial Stream. A stream that holds water throughout the year.

81. Permanent Crop. For the purposes of this Order, a permanent crop is any crop that is grown in the ground for a period of three years or more, for example wine grapes, avocados, walnuts, etc. A crop that is grown repeatedly in the same place for a period of many years, such as broccoli, is not considered a permanent crop.
82. Permanent Structure. Anything constructed or erected with a fixed location and a permanent foundation on the ground (e.g., buildings, mobile homes (“manufactured homes”), access roads,⁵ walls, and fences).
83. Permittee. A Discharger enrolled in the Agricultural Order. See also Enrollee.
84. Pesticide. Any substance intended to control, destroy, repel, or otherwise mitigate a pest. The term pesticide is inclusive of all pest and disease management products, including insecticides, herbicides, fungicides, nematicides, rodenticides, algicides, etc.
85. Pesticide Management Practices. Management practices designed to reduce or eliminate pesticide runoff into surface water and groundwater.
86. Point Source. Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which wastes are or may be discharged.
87. Pollutant. The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water, including dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.
88. Pollution. Any alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: a) the waters for beneficial uses, b) facilities which serve these beneficial uses. Pollution may include contamination.
89. Preservation. Removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

⁵ See definition of Access Road for details on when an access road is considered a permanent structure.

90. Qualified Biologist. An individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the cultivation site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species.
91. Qualified Professional. An individual licensed in California under the Professional Engineer Act (e.g., Professional Engineer), Geologist and Geophysicist Act (e.g., Professional Geologist, Certified Engineering Geologist, or Certified Hydrogeologist)⁶, and Land Surveyors' Act (e.g., Professional Land Surveyor); a California Registered Professional Forester (RPF); or a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD). A Qualified Professional must only perform work they are qualified to complete, consistent with applicable licensing and registration restrictions, and must certify any work completed.
92. Quality of the Water. The "chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use" as defined in the California Water Code Sec. 13050(g).
93. Ranch. For the purposes of this Order, the term "ranch" is inclusive of both ranches and farms. A ranch is a tract of land where commercial crops are produced or normally would have been produced. Individual ranches typically have a similar ranch manager, operator, or landowner, and are categorized by geographic location.
94. Reestablishment. Manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.
95. Receiving Waters. Surface waters or groundwater that receive or have the potential to receive discharges of waste from irrigated lands.
96. Reference Site. For the purposes of the RipRAM and/or CRAM assessment is defined as a site deemed to be in good to excellent condition located in a commercial irrigated agricultural area of a similar ecoregion to the assessed site, as outlined in the MRP.
97. Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a

⁶ See Business and Professions Code sections 6700-6799, 7800-7887, and 8700-8805, respectively.

degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area.

98. Responsible Party. The landowner or operator of irrigated lands that discharge or have the potential to discharge waste that could directly or indirectly reach waters of the State and affect the quality of any surface water or groundwater. See also Discharger.
99. Restoration Plan. Describes the purpose, goals, and objectives of the restoration effort, clearly defining the soils, hydrology, vegetation, and fish and wildlife habitat criteria that are to be met and are appropriate for the site and the project objectives. The planning steps must be accomplished with the use of a functional assessment-type procedure. The objectives must be determined by an analysis of current and historic site functions based on which functions can reasonably be supported by current site constraints. Data from historic and recent aerial photography and/or other remotely sensed data, soil maps, topographic maps, stream gage data (if available), intact reference riparian and/or wetland sites, and historic records must be gathered. The soils, hydrology, and vegetative conditions existing on the site, the adjacent landscape, and the contributing watershed must be documented in the planning process. The nutrient and pesticide tolerance of the plant and animal species likely to occur shall be evaluated where known nutrient and pesticide contamination exists. Upon completion, the site must meet soil, hydrology, vegetation, and habitat conditions of the riparian and/or wetland area that previously existed on the site to the extent practicable. Invasive species, federal/state noxious plant species, and nuisance species (e.g., those whose presence or overpopulation jeopardize the restoration effort) shall be controlled on the site as necessary to restore riparian and/or wetland functions. The establishment and/or use of non-native plant species is prohibited.
100. Requirements of Applicable Water Quality Control Plans. Water quality objectives, prohibitions, Total Maximum Daily Load (TMDL) Implementation Plans, or other requirements contained in the Basin Plan, as adopted by the Central Coast Water Board and approved according to applicable law.
101. Riparian Rapid Assessment Method (RipRAM). A rapid assessment tool to assess the condition of riparian resources along a stream reach. RipRAM yields an overall score for each assessed area based on the component scores of eight metrics.
102. RipRAM Practitioner. An individual who has satisfactorily completed the required RipRAM training program.
103. Riparian. The ecosystem that transitions between the aquatic ecosystem and the adjacent terrestrial ecosystem and is identified by unique soil characteristics and distinctive vegetation communities that require free and unbound water.

104. Riparian Areas. Areas adjacent to rivers, streams, creeks, washes, arroyos, and other waterbodies or channels having banks and bed through which waters flow at least periodically. These areas are subject to periodic flooding and are generally characterized or distinguished by a difference in plant species composition or an increase in the size and density of vegetation as compared to upland areas. For the purposes of this Order, Riparian Areas include Wetland Areas.
105. Sedimentation. The deposition of sediment carried from surface runoff, which can occur when the velocity of water is not great enough to keep the sediment in suspension.
106. Sediment Basin. A constructed basin to capture and detain surface runoff for a sufficient length of time to allow sediment to settle.
107. Semi-Permanent Crop. For the purposes of this Order, a semi-permanent crop is any crop that is grown in the ground for a period greater than one year but less than three years, for example some varieties of strawberries, bell peppers, artichokes, etc. A crop that is grown repeatedly in the same place for a period of one or many years, such as broccoli, is not considered a semi-permanent crop.
108. Setbacks. Areas extending an established distance from waterbodies, consisting of vegetation to protect water resources and Aquatic Habitat and Wildlife Habitat beneficial uses from nonpoint source pollution, provide bank stabilization, minimize erosion, and provide flood attenuation.
109. Slope. Must be determined across the natural topography (preconstruction) of the land to be disturbed. Measure the highest and lowest elevations of the land to be disturbed, then measure the horizontal distance separating the highest and lowest elevations. Determine the slope using the formula below (multiply the ratio by 100 to find the percent value). There may be more than one slope value if the low elevation has higher elevations in different directions. The highest slope value calculated (highest percentage numerically) is the value to be reported.

Slope Formula

$$\text{Slope} = (\text{Elevation Difference} / \text{Horizontal Difference}) \times 100$$

Slope – Value of slope expressed as a percentage.

Elevation difference – Report in feet to an accuracy of one inch or one tenth of a foot.

Horizontal distance – Report in feet to an accuracy of one inch or one tenth of a foot.

110. Source of Drinking Water. Any water designated as municipal or domestic supply (MUN) beneficial use in a Regional Water Board Basin Plan and/or as defined in State Water Resources Control Board (SWRCB) Resolution No. 88-63.

111. Soil Exposure. When ground cover, vegetative cover, and/or plant residues are absent from land and soil particles are exposed.
112. Soil Permeability. The rate water moves through soil, governed by soil texture and soil structure.
113. Soil Structure. The way various soil particles (clays, sands, and silts) are held together and oriented with respect to each other; improved or damaged by irrigation and general agricultural management.
114. Soil Texture. The ratios of various sizes of the soil particles clays, sands, and silts.
115. Soil Water Retention. The soil's ability to retain water, strongly related to texture and structure, which provides an ongoing supply of water to plants for growth and survival.
116. Specific Crop, or Crop. For the purposes of this Order, examples of crops or specific crops include broccoli, lettuce, spinach, wine grapes, avocados, etc. The terms crop and specific crop to not refer to categories of crops such as vegetables, vineyards, orchards, etc.
117. Stabilized Compost. Any organic material that has undergone the Process to Further Reduce Pathogens, as described in title 14 of the California Code of Regulations, section 17868.3 and has reached a stage of reduced biological activity as indicated by reduced temperature and rate of respiration below that of active compost. Stabilized Compost is interchangeable with Final Product.
118. Stormwater. Stormwater runoff, snow melt runoff, and surface runoff and drainage, as defined in 40 CFR 122.26(b)(13).
119. Stormwater Runoff. Precipitation water in excess of what can infiltrate the soil surface and be stored in small surface depressions.
120. Strahler Stream Order. First developed by Arthur Strahler and is used to characterize the relative size of streams (Strahler, 1957). Strahler stream ordering is a method for assessing river size and complexity based on the number and hierarchical relationship of tributaries. When determining Strahler order, perennial and intermittent streams are included. The headwater stream (a stream with no tributaries) is considered a 1st order stream. When two first order streams join, a second order stream is formed. When two second order streams join, a third order stream is formed, and so on. The ordering continues downstream within a drainage network. Smaller or lower order streams entering the network will not change the Strahler order of larger or higher order streams. For example, a third order stream entering a fourth order stream will not change the Strahler order of the fourth order

stream. The original *NHDPPlus* algorithm used to calculate Strahler order produced values that were high and frequently not in agreement with published sources. A new algorithm was developed and implemented to correct Strahler order values throughout *NHDPPlus*. In addition to Strahler order (SO), the new algorithm also incorporates an innovative secondary variable called Strahler calculator (SC), which assists in properly incrementing Strahler order in complex drainage systems. Removing divergences using Strahler calculator simplifies the identification of mainstem streams in all networks. The SOSC approach was developed by Suzanne M. Pierson (CSC) and Barbara J. Rosenbaum (Excel Management Systems, Inc.) while under contract to the US Environmental Protection Agency's Office of Research and Development National Health and Environmental Effects Research Laboratory – Western Ecology Division (US EPA ORD/NHEERL/WED) in Corvallis, Oregon.

121. Subsurface Drainage. Water generated by installing drainage systems to lower the water table below irrigated lands. The drainage can be generated by subsurface drainage systems, deep open drainage ditches or drainage wells.
122. Surface Runoff. Precipitation, snow melt, or irrigation water in excess of what can infiltrate the soil surface and be stored in small surface depressions; a major transporter of non-point source wastes in rivers, streams, and lakes.
123. Tailwater. Runoff of irrigation water from the lower end of an irrigated field. See also Irrigation Runoff or Return Flow.
124. Tile Drains. Subsurface drainage which removes excess water from the soil profile, usually through a network of perforated tile tubes installed 2 to 4 feet below the soil surface. This lowers the water table to the depth of the tile over the course of several days. Drain tiles allow excess water to leave the field. Once the water table has been lowered to the elevation of the tiles, no more water flows through the tiles. The Central Coast Water Board anticipates evaluating longer timeframes necessary to address tile-drain discharges, for inclusion in a subsequent Agricultural Order.
125. Total Maximum Daily Load (TMDL). The calculation of the maximum amount of a particular material that a waterbody can assimilate on a regular basis and still support beneficial uses designated for that waterbody.
126. Total Nitrogen Applied (TNA). Total nitrogen applied includes nitrogen in any product, form, or concentration including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water; it is reported in units of pounds of nitrogen per crop, per acre for each farm/ranch or nitrate loading risk unit.

127. Uppermost Aquifer. The geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer.
128. Vegetative Mulch. A cover crop, like hairy vetch, planted between or underneath a main crop to provide soil surface protection, erosion control, and/or improve soil health.
129. Waste. “Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal” as defined in the California Water Code Sec. 13050(d). “Waste” includes irrigation return flows and drainage water from agricultural operations containing materials not present prior to use. Waste from irrigated agriculture includes *earthen materials* (such as soil, silt, sand, clay, rock), *inorganic materials* (such as metals, salts, boron, selenium, potassium, nitrogen, phosphorus), and *organic materials* such as pesticides.
130. Water Quality Buffer. A water quality protection zone surrounding perennial or intermittent channels, including adjacent wetlands (as defined by the Clean Water Act), with riparian vegetation and/or riparian functions that support beneficial uses and protect water quality.
131. Water Quality Control. The “regulation of any activity or factor which may affect the quality of the waters of the State and includes the prevention and correction of water pollution and nuisance” as defined in the California Water Code Sec. 13050(i).
132. Water Quality Criteria. Levels of water quality required under Sec. 303(c) of the Clean Water Act that are expected to render a body of water suitable for its designated uses. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or industrial processes. The *California Toxics Rule* adopted by USEPA in April 2000, sets numeric Water Quality Criteria for non-ocean waters of California for a number of pollutants. See also Water Quality Objectives.
133. Water Quality Objectives. “Limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specified area,” as defined in Sec. 13050(h) of the California Water Code. Water Quality Objectives may be either numerical or narrative and serve as Water Quality Criteria for purposes of Section 303 of the Clean Water Act. Specific Water Quality Objectives relevant to this Order are identified in this Appendix A in Tables 1A and 1B.

134. Water Quality Standard. Provisions of State or Federal law that consist of the beneficial designated uses or uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular waterbody, and an anti-degradation statement. Water quality standards includes water quality objectives in the Central Coast Water Board's Basin Plan, water quality criteria in the *California Toxics Rule* and *National Toxics Rule* adopted by USEPA, and/or water quality objectives in other applicable State Water Board plans and policies. For groundwater with the beneficial use of municipal or domestic water supply, the applicable drinking water standards are those established by the USEPA or California DDW, whichever is more stringent. Under Sec. 303 of the Clean Water Act, each State is required to adopt water quality standards.
135. Waters of the State. "Any surface water or groundwater, including saline waters, within the boundaries of the State" as defined in the California Water Code Sec. 13050(e), including all waters within the boundaries of the State, whether private or public, in natural or artificial channels, and waters in an irrigation system. "Waters of the state" includes all "waters of the U.S."⁷
136. Waterbody. Areas where there is any significant accumulation of water (e.g., wetlands, estuaries, marshes, swamps, lakes, ponds, vernal pools, rivers, streams, creeks, springs, artesian wells, drainages, canals, and all other waterbodies (natural or artificial) with defined banks and water at least a portion of a year). These areas are typically shown on U.S. Geological Survey (USGS) topographic maps.
137. Wet season. The Central Coast's wet/rainy season October 1st – April 30th, as opposed to the dry/irrigation season May 1st – September 30th.
138. Wetland. Defined in the State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State as "[a]n area . . . if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. The following wetlands are waters of the state:

⁷ Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w).) This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S." under the federal Clean Water Act.

- a. Natural wetlands,
- b. Wetlands created by modification of a surface water of the state,⁸ and
- c. Artificial wetlands⁹ that meet any of the following criteria:
 - i. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
 - ii. Specifically identified in a water quality control plan as a wetland or other water of the state;
 - iii. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
 - iv. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
 - i. Industrial or municipal wastewater treatment or disposal,
 - ii. Settling of sediment,
 - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
 - iv. Agricultural crop irrigation or stock watering,
 - v. Fire suppression,
 - vi. Industrial processing or cooling,
 - vii. Active surface mining – even if the site is managed for interim wetland functions and values,
 - viii. Log storage,
 - ix. Treatment, storage, or distribution of recycled water,
 - x. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits), or
 - xi. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

139. Wetland Areas. Distinct ecosystems that are flooded by water, either permanently or seasonally, where oxygen-free processes prevail. The primary factor that distinguishes wetlands from other landforms or water bodies is the characteristic

⁸ “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

⁹ Artificial wetlands are wetlands that result from human activity.

vegetation of aquatic plants, adapted to the unique hydric soil. For the purposes of this Order, Riparian Areas include Wetland Areas.

140. Wildlife Habitat. Beneficial use of water that supports terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.