__Current _X_ Proposed

California Department of Food and Agriculture
Integrated Control Branch
Senior Environmental Scientist (Specialist)
Duty Statement

I. Program/Position Identification

The primary responsibilities of the Integrated Control Branch (IPCB) are the detection and control or eradication of non-native, invasive species that threaten California's agricultural and natural resources. This is accomplished through several general, federal, and industry funded Programs. These programs include, but are not limited to, the Cotton Pest Program, Curly Top Virus Program, Hydrilla Eradication Program, Forest Service Grants Program, Vertebrate Control Research Program, Naval Orangeworm Program, Biological Control Program, Apiary Protection Program, and the Weed Program.

Under the general direction of the Senior Environmental Scientist (Supervisory), the incumbent performs a broad range of scientific and professional office and field duties involving the research, environmental analysis, outreach, and logistics for the Integrated Control Branch.

Classification:	**Senior Environmental Scientist (Specialist)**
Working Title:	**Same**
License or Other Requirement:	**See specifications on CALHR's website for minimum qualifications.** **Valid CA driver's license** **Safe driving record**
Position Number:	**014-605-0765-xxx**
Division/Branch:	**PHPPS/Integrated Pest Control**
Location:	**Sacramento**
Date Prepared:	**June 2023**
Work Hours/Shift:	**M – F: 8 a.m. – 4:30 p.m.**

II. Essential and Non-Essential Job Functions

A. Essential Functions:

Function #1: Research and Program Assessment Activities 35%

- Independently complete California Pest Rating Proposal Forms (CPRPF), as required by State regulation, establishing pest risk assessments of noxious weeds to determine the appropriate rating, which provides the foundational information for any regulatory action that may be taken by the CDFA and/or California county agricultural commissioners' staff. The results of these assessments may also be used to inform State policy regarding invasive species.
- Scientifically analyze and reevaluate, as required by State regulation, existing risk assessments and pest ratings as advisable to determine if the risk assessments and pest ratings are still appropriate and propose new pest ratings with revised risk assessments as needed through the previously described processes.
- Serve as a scientific information resource for the CDFA, the County Departments of Agriculture, USDA, and other stakeholders by providing scientific botanical information that may factor into the scientific evaluation of a plant species' potential significance as an agricultural or environmental pest or pest host, and as a result, for enforcement of quarantine regulations of the Food and Agriculture Code.
- Independently develop, assist, and advise Program Managers on the implementation of pest detection, eradication and control methods for non-native, invasive agricultural plant species that occur in California. These efforts involve complex and specialized research investigations into the biology/ecology of target plant species and natural/managed ecosystems. These activities include:
    i. Research to examine the biology and ecology of the invasive plant species as well as exploration for methods to control and eradication.
    ii. Planning, coordinating, and implementation of control and eradication activities.
    iii. Research to measure the efficacy and effects of control and eradication methods.
- Develop and implement innovative field research activities on the effects of invasive plant species detection, control, and eradication for the protection of livestock, human health, vegetation, fish, wildlife, water supplies, land, and other aspects of the environment. These activities aid in creating processes to ensure that the State's agricultural industry and natural resources are free of any negative effects that may arise with detection, eradication and control methods used by programs.

- Develop the complex environmental regulatory measures for the State, county, local agencies, and stakeholders as well as advise on implementation, environmental standards, and various environmental health-related regulations to ensure that the State's agricultural lands and natural resources remain free of invasive plant species.
- Act as a lead for other Environmental Scientists and technical/professional staff that conduct invasive plant species detection, eradication, and control activities for regional or statewide programs.
- Provide complex scientific feedback on USDA's pest risk assessments for new commodities proposed for market access to California. This includes understanding of exotic weed species globally and any associated risk to California agriculture and the environment.

Function #2: Environmental Analysis Activities 25%

- Analyze information from research activities to prepare and/or review intricate and difficult environmental impact reports and other documents to determine the effects of proposed activities on the environment. Often perform environmental analyses with collected field research data to assist in report preparation.
- Execute complicated scientific analyses (including descriptive and spatial statistics or modelling) from collected data from field and applied research studies and prepare scientific reports and/or presentations. Perform multifaceted research activities to evaluate efficacy and environmental impact of projects. Document project progress, complete required reports, and submit documentation to appropriate federal, State, and county agencies as well as to the supervisor.
- Prepare or consult on environmental permitting packages, regulatory permits, and other environmental documents for State, county, and local agencies to ensure each entity is following current eradication and control regulations and the State's agricultural land and natural resources are not in danger from harmful pollutants. Coordinate with other environmental and environmental health programs with public and private agencies.
- Maintain knowledge of environmental programs and policies of the State relating to plant pest detection, control, and eradication, for protection of the State's agricultural industry and natural resources by reading scientific manuals and articles and attending seminars, conferences, and training sessions.

Function #3: Grants Management 20%

- Advertise grant opportunities for eradication and control of non-native invasive plant species to external entities through the CDFA grants portal, in coordination with administrative staff.
- Manage weed program grants to support eradication and control of non-native invasive plant species. Work with administrative staff to ensure grants are managed according to CDFA policies, including report review and approval, and the processing of invoices in a timely manner.
- Act as liaison and information clearinghouse to land management and weed control entities both within and without government. Attend group meetings to coordinate responses, establish priorities, and enhance effectiveness of weed control and eradication, including early detection and rapid response. Provide targeted technical advice to increase penetration of partner processes and actions complementing CDFA program's mission.

Function #4: Outreach 10%

- Conduct literature and data searches from research activities (i.e., new findings, significant occurrences, and accomplishments, etc.) to develop necessary information for outreach materials (such as brochures and flyers) for workshops, field days, conferences, and presentations at universities, other science agencies, and State Ag Fairs.
- In conjunction with the Statewide Weed Coordinator, coordinate with other State, federal, and local agencies, land managers, NGOs, and tribes, to increase effectiveness and reach of eradication and control activities of invasive and potentially harmful weeds.
- Conduct presentations on new findings, significant occurrences, and accomplishments on research activities at meetings with State, Federal, County, which would include organizing periodic Weed Tours with county agricultural commissioner and other CDFA staff.
- Participate in and provide training in various disciplines regarding environmental research activities on control and eradication methods to State, federal, and county agencies.
- Represent the Department in legal hearings and field investigations for environmental matters relating to the program's activities. Prepare abatement declarations.
- Organize research findings and write and/or edit scientific papers for publication; consult with and advise other agencies and institutions engaged in related environmental analysis, management, planning, regulations, investigation, and research.

- Communicate State and federal environmental laws, regulations and policies to the public, industry, counties, and other commercial agricultural groups to ensure each entity is compliant.

A. Non-Essential Functions:

Function #1: Logistics Activities 5%

- Evaluate funding and equipment needs to maintain effective and efficient projects. Report findings and makes recommendations to branch management.
- Assess equipment and material needs for programmatic field activities. Make recommendations to supervisor if repairs, modifications, or new materials are needed.

Function #2: Miscellaneous duties 5%

- Perform administrative tasks including writing progress reports, contributing to budget projections, editing documents, and responding to e-mail communication and phone calls.
- Perform other job-related duties as required.

III. Work Environment

About 80% of the workload will be in permanent buildings or trailers leased or owned by the State or cooperating agencies, home office, or other locations. The setting is standard with a phone, computer, keyboard, desks, tables, chairs, copier, stapler, printers, calculators, and writing instruments. Computer software used may include MS Word, Excel, PowerPoint, Access, and Publisher as well as other databases/software created especially for a given research task.

The remaining 20% of the workload requires traveling to remote and/or populated areas within the State of California via government (State or Federal) assigned vehicle (car/truck). Incumbent will be required to travel. Travel may be on a short notice that requires full days or over few to several nights in length. When working in the field, the incumbent works alone or with a group of scientists, field staff, and partners. Incumbent may work with varied and unfamiliar vehicles and equipment, including excavators, airboats, kayaks, trailers, pumps of various kinds, and ATVs. The incumbent may work in isolated locations and may work alone for extended periods. Often, activities may require driving for several hours (alone or with company), lifting objects, and moving equipment of various weights. Also, the incumbent may encounter extremes in temperature, humidity, variable terrain (smooth to irregular and unstable), and move through mud, shallow water, and dense vegetation. Incumbent may be required to enter or swim in bodies of water

(lakes and ponds) that vary in temperature, length, width, and depth. Incumbent may also be required to navigate variable lengths of distance over unpredictable terrain. Various sitting, bending, stooping, standing, and reaching motions may be required on an irregular basis. Noise level for work is variable. Incumbent may work extended hours and days at any given time in the month including holidays.

Incumbent may be required on short notice to work on emergency projects for the Branch or any other program for the Plant Division. The work environments for these projects closely resemble the above second paragraph and may involve longer travel days.

Regular or recurring telework may occur as part of the incumbent's ongoing regular schedule in accordance with CDFA's Telework Policy.

IV. Employee's Statement

(Initial applicable statement)

____ I have read and understand the duties and essential functions of the position. I understand Reasonable Accommodation[1] and how it applies to essential functions. I can perform the duties of this job without Reasonable Accommodation.

OR

____ I have read and understand the duties and essential functions of the position. I understand Reasonable Accommodation[1] and how it applies to essential functions. I will need Reasonable Accommodation to perform one or more of the essential functions described in this duty statement.

_____	_____
Employee Signature[2] Date	Supervisor Signature Date
_____	_____
Print Name	Print Name

[1] A reasonable accommodation is an adjustment or modification to a job or workplace that allows qualified employees or prospective employees to perform the essential functions of the job successfully.
[2] Duties of this position are subject to change and may be revised as needed or required. If/when duties change you will be provided a revised duty statement to sign.