

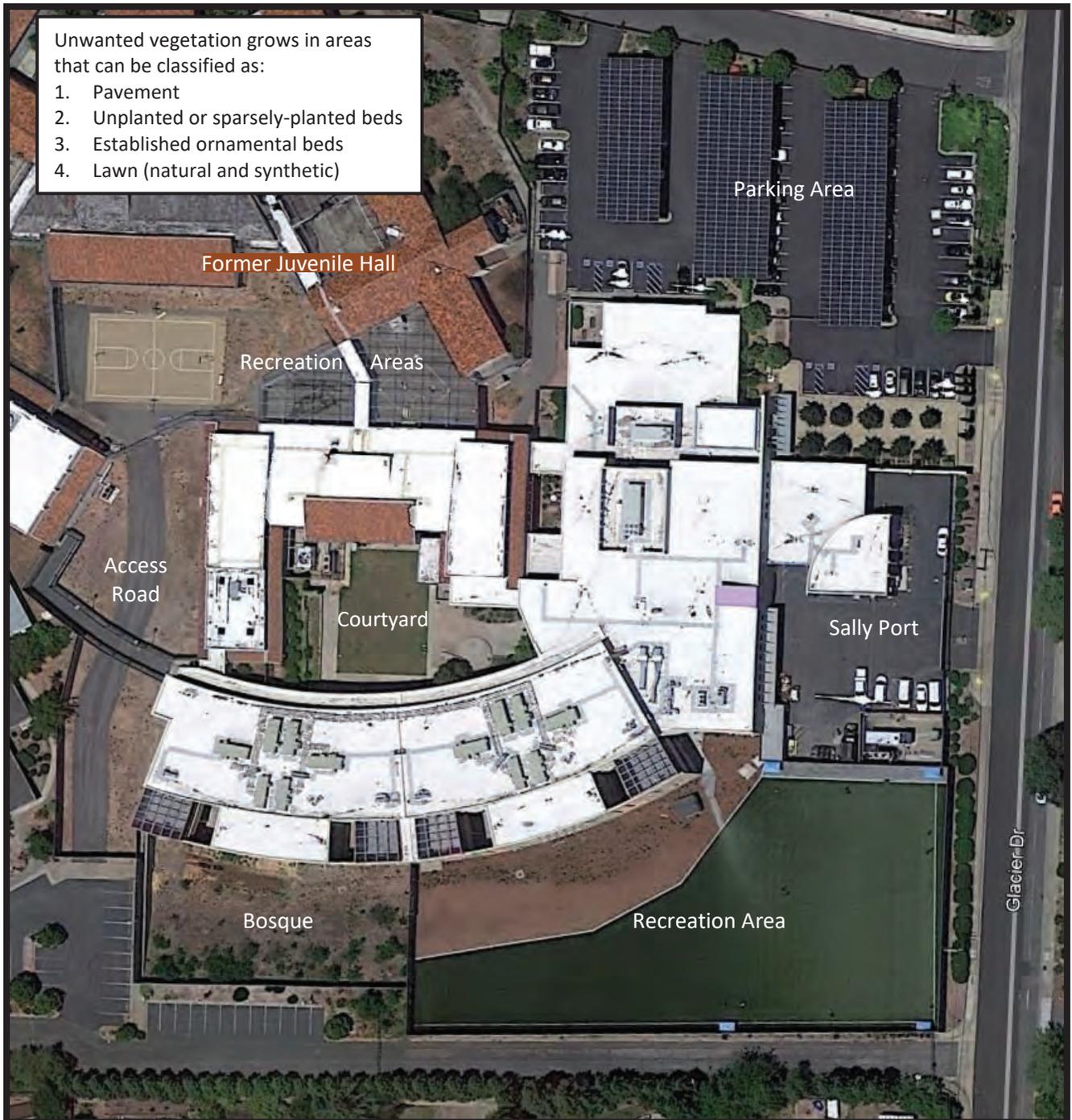
Contra Costa County
DECISION DOCUMENTATION FOR VEGETATION MANAGEMENT AT JUVENILE HALL

Date: 11/18/2021

Departments: Public Works—Grounds Services
Probation Department

Location: John A. Davis Juvenile Hall, 202 Glacier Dr, Martinez

Situation: Presence of nuisance vegetation throughout property



<p>What vegetation management mandates apply to the site?</p>	<p><u>Fire Protection Ordinance:</u></p> <p>Juvenile Hall is subject to the regulations of the Contra Costa Fire Protection District (ConFire). Minimum weed abatement standards can be found at: http://www.cccfpd.org/pdfs/WA-2-minimum-standards-17.pdf</p> <p>Excerpts from the County's fire protection ordinance:</p> <p>Title 7, Division 722, Section 320.4.1 says, "No person who has any ownership or possessory interest in or control of parcel of land shall allow to exist thereon any hazardous rubbish, weeds, trees, or other vegetation that constitutes a fire hazard."</p> <p>Title 7 Division 722, Section 320.4.2.1 says, "The Fire Code Official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of streets which are improved, designed, or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth."</p> <p><u>Contra Costa County Administrative Bulletin #542</u></p> <p>"The County will provide pest management in and on County maintained properties and facilities using integrated pest management (IPM). The purpose of this policy is to promote the combined use of physical, cultural, biological, and chemical control methods to effectively manage pests with minimal risk to humans and the environment."</p> <p>California Education Code Section 17610. (a)</p> <p>"It is the policy of the state that effective least toxic pest management practices should be the preferred method of managing pests at schoolsites and that the state, in order to reduce children's exposure to toxic pesticides..." Full text of the Healthy Schools Act can be found at: https://www.cdpr.ca.gov/docs/schoolipm/school_ipm_law/hsa_final_text.pdf</p>
<p>What are the management goals for the sites?</p>	<p>To be responsible stewards of the site in a manner that reinforces the safety and security of the facility while promoting the restorative beauty of landscape assets. Sustainable strategies are prioritized and are consistent with the stated mission, vision, or responsibilities of each department as follows:</p> <p><i>"Public Works employees deliver cost effective, safe, reliable and sustainable projects, programs and quality services with a focus on our communities and provide support services that are competitive, attentive, responsive, efficient and safe to enable County Departments to provide high quality services to the public."</i></p> <p><i>"A talented Probation team working collaboratively to create opportunities for those we serve to experience a positive outcome that strengthens the individual and makes the community safe."</i></p> <p>Responsibilities of the Office of Reentry and Justice include: <i>"fostering capacity-building and partnership development, leading the procurement process and contract management for community-based reentry and justice service providers,"</i> and <i>"identifying and developing new initiatives and funding opportunities."</i></p> <p>Vegetation management objectives include the following:</p> <ol style="list-style-type: none"> 1. Ensure site security through the maintenance of clear sightlines. 2. Proactive vegetation management that promotes the flourishing of regenerative plant species. 3. Provision of job skills training, work experience, and horticultural therapy in multiple areas of vegetation management. 4. To ensure programmatic linkages that provide career pathways within this institution and the community that are accessible for youth who are either 1) at risk, 2) detained, 3) on probation.
<p>How often is the site monitored?</p>	<p>Probation staff are at the site daily but are not directly monitoring for issues relating to vegetation. Grounds personnel typically visit Juvenile Hall on a weekly basis for routine maintenance and to respond to work requests. An effective channel of communication exists between Probation and Grounds that allows for timely reaction to urgent matters.</p>
<p>Weeds have been identified as the following:</p>	<p>Generally, weeds common to landscape plantings¹ in the region are often Vegetation growing throughout the property are considered weeds if they create visual obstructions or are not maintained according to the perceptions of onsite staff. Ornamental plants that impede walkways or otherwise contribute to hazardous conditions are designated as undesirable growth.</p>
<p>Are populations high enough to require control? Explain</p>	<p>There are no predominant plant varieties growing voluntarily onsite in numbers that merit species-specific action. Vegetation in areas where safety and security are concerned must be mitigated.</p>

<p>Is this a sensitive site?</p>	<p>Is this a "highly sensitive site" as defined by PWD Environmental staff? A highly sensitive site contains a known habitat for, or is close to sightings of, endangered or threatened species.</p>	<p>No</p>
	<p>Are any sites under management part of any of the court-ordered injunction?</p>	<p>No, the closest areas subject to injunction-related pesticide use limitation include probable habitat for the salt marsh harvest mouse which is approximately 1.6 miles away and probable habitat for the Alameda whipsnake which is approximately 2.2 miles away.</p>
	<p>Are any of the sites known or potential habitat for any endangered or threatened species?</p>	<p>No</p>
	<p>Are any of the sites on or near an area where people walk or children play?</p>	<p>Yes</p>
	<p>Are any of the sites near a drinking water reservoir?</p>	<p>No, the closest open-air drinking water reservoir is 1.7 miles from this facility.</p>
	<p>Are any of the sites near crops?</p>	<p>No, the closest commercial crop production facility is 1.5 miles from this facility.</p>
	<p>Are any of the sites near desirable trees or landscaping?</p>	<p>Yes</p>
	<p>Are any of the sites on soil that is highly permeable, sandy, or gravelly?</p>	<p>No, site soil is generally classified as clay loam</p>
	<p>Is it within a Groundwater Protection Area?</p>	<p>No, the closest Groundwater Protection Area is approximately 2.3 miles from this facility. There are no major groundwater basins underlying Martinez.</p>
	<p>Is there a well head near the site?</p>	<p>No, the closest well head listed in the California Department of Pesticide Regulation's well inventory database is approximately 3 miles from this facility.</p>
<p>Which cultural controls were considered?</p>	<p>Enhanced Landscapeⁱⁱ Stewardship- This tactic promotes a reexamination of how to more closely blend site landscape programming with the broader aims of the facility. A central tenet of this strategy is to foster holistic landscape management arrangements through strategic partnerships that maximize land-asset utilization. The Grounds Division would retain primary responsibility for grounds maintenance and would be keystone partners in any proposed cooperative. Clear delineation of partner responsibilities that pertain to the ongoing care of enhanced exterior spaces would be detailed in writing.</p> <p>There are multiple regional programs,ⁱⁱⁱ county residents, and local community-based organizations (CBO's)^{iv} that could inform the development of mutually beneficial collaborations with mission-aligned partners. Some incorporate career and technical education training programs, while others work to grow food, improve pollinator habitat, or initiate onsite composting programs among other valuable ventures. The Contra Costa Resource Conservation District^v is the local leader in facilitating the implementation of innovative stewardship practices while prioritizing equity and inclusion.</p> <p>The facility will be drastically impacted by the current state budget that transitions responsibility to local jurisdictions for youth sentenced to facilities operated by the Division of Juvenile Justice (DJJ). This could provoke a reconceptualization of how the property can meet its' potential as a County resource. Existing juvenile justice initiatives^{vi} and AB 109^{vii} sources may be able to assist in the design and funding of the transition to more closely match the County-stated objectives to "create linkages between at-risk youth and various needed services and community programs."^{viii} Further cultivation of existing partnerships with Contra Costa Health Services and Contra Costa County Office of Education may further reveal landscape uses that support the expansion of clinical and educational programs.</p> <p>Competitive Planting: The goal of this tactic is to establish desirable plant species to reduce weed coverage. Plant selection in the context of which weed pressures are present is the predominant factor in projecting the success of planting activities. These efforts are generally more successful when integrated weed control methods are employed prior to and after planting. Several elements of this tactic are consistent with the adopted definition of integrated pest management in the Countywide IPM policy as "an ecosystem-based strategy that focuses on the long-term prevention of pests..."^{ix}</p> <p>Currently, the inner courtyard and various vegetated beds in the parking lot and other locations surrounding the facility use this method.</p> <p>Mulching: Wood chip mulch has been extensively applied around Juvenile Hall. Some has broken down and either needs to be replenished or the mulched areas could be transitioned to active gardens. Recent mulch and</p>	

	<p>planting projects around the Probation training facility near the southwest corner of the property will reduce the reliance on chemical controls as the new plants become established.</p> <p>Artificial Turf Surfacing: Juvenile Hall transitioned a 30,000 square foot grass recreation field to synthetic surfacing in 2019.</p> <p>Flaming: May be effective on certain broadleaf species in smaller ornamental areas and on weeds growing in pavement cracks if timed to coincide with early phenological stages.</p> <p>Weed Steaming: There are multiple areas within the property where this tactic could be effective. Some include the mulched areas in the west side access road, around the basketball court, and in pavement cracks.</p> <p>Soil Solarization: If areas covered by mulch remain unplanted, this method may be a supplemental tool to keep nuisance vegetation down in areas currently inaccessible to detained youth.</p> <p>Crack Sealing: For vegetation growing in cracks, the placement of surface-compatible materials into fractured sections of pavement will prevent weed growth and prolong the life of hardscape elements.</p> <p>Summary Statement: Strategies related to enhanced landscape stewardship and competitive planting represent the greatest potential for long-term impact on pest prevention. Conversely, enhanced landscape stewardship requires a complex outreach and engagement process. The organizational bandwidth to appropriately lead such an effort may not exist if realistic outcomes are perceived to be of minimal magnitude. However, trends in juvenile detention have dramatically shifted over the 16 years this facility has been in operation. There is willingness to preliminarily discuss opportunities to recalibrate the landscape design to better support the evidence-based programming for youth detainees.</p> <p>The sparsely-planted beds in the Bosque area (11,800 square feet) and mulched portion of the main recreation yard (10,900 square feet) present the most immediate opportunity to utilize the landscape for fruit and vegetable production, pollinator and avian habitat, or similar pursuits. Portions of the primarily paved recreation yards on the north side of the property have been identified for their potential to incorporate programming related to raised bed gardening. Approximately 16,000 square feet of unplanted, mulched beds adjacent to the west side access road are prime locations for potential competitive planting.</p> <p>Mulching will continue to be prioritized as a preventative tactic. Decomposing chipped wood fosters regenerative soil that is conducive to the long-term establishment of healthy plants.</p> <p>The artificial turf field may become more conducive to weed growth in the coming years, particularly in seams and surface tears. Even minimal concentrations of dust and other wind-blown materials can allow the establishment of weeds that subsequently accelerate surface deterioration. Consult the manufacturer for cleaning guidelines.</p> <p>Weed steaming and crack sealing are promising strategies for this facility and merit further consideration.</p>
<p>Which physical controls were considered?</p>	<p>String Trimming: Aside from chemical controls, this is the most common tactic used at this location.</p> <p>Hand Pulling: This tactic is used in various ornamental landscapes on the property, but isn't feasible at the scaled needed during seasonal growth of volunteer weeds.</p> <p>Mowing: There is little mowing done at Juvenile Hall.</p> <p>Summary Statement: String trimming will continue be utilized as the primary physical control method used. Mowing as a weed management tactic is limited at this location primarily due to the compartmentalized nature of this site. In areas that may otherwise be conducive to mowing, successful mulching activities have reduced weed growth.</p>
<p>Which biological controls were considered?</p>	<p>Grazing: Conditions at Juvenile Hall are not conducive to grazing.</p> <p>Summary Statement: There are no known biological controls suitable for this facility.</p>

Which chemical controls were considered?

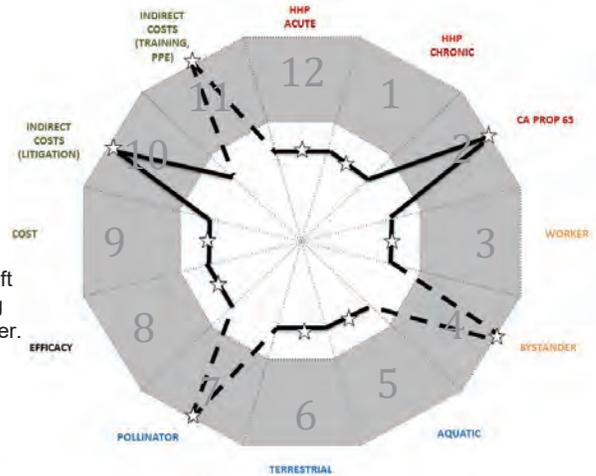
For additional information about the graphics used to illustrate pesticide risks associated with each product, see the *Pesticide Risk Footprint Tool* procedure document.

The following herbicides are occasionally used at Juvenile Hall:

RoundUp Pro Concentrate

Active ingredient: glyphosate
Signal word: Caution
Product label/SDS

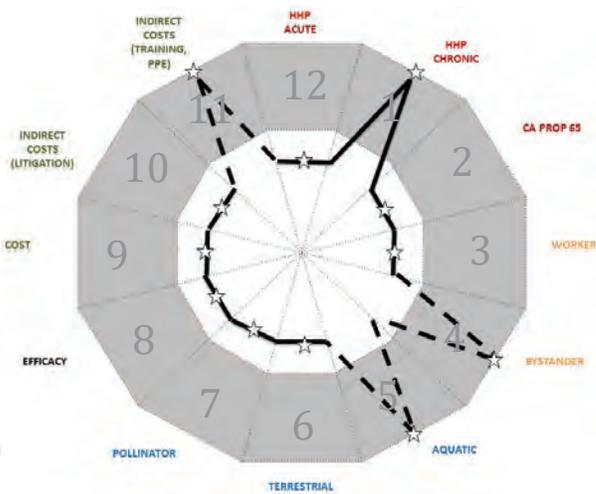
- | <u>Risk Factors</u> | <u>Mitigation Measures</u> |
|---------------------------------------------|---------------------------------------------------------------------------------------------|
| 2. Listed as causing cancer on 7/7/2017 | |
| 4. Spray application | -Avoid drift and strictly enforce 4 hour REI. |
| 7. Toxic to honey bee brood | -Do not apply or allow to drift to flowering plants including weeds. Do not apply to water. |
| 10. Multiple cases involving litigation | |
| 11. Annual HSA training for all applicators | -Incorporate HSA training into annual IPM Policy training to keep costs down |



SureGuard Herbicide

Active ingredient: flumioxazin
Signal word: Caution
Product label/SDS

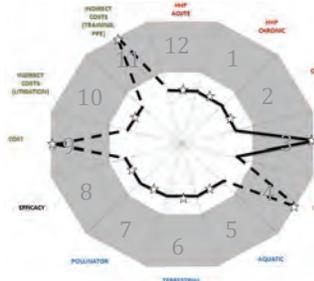
- | <u>Risk Factors</u> | <u>Mitigation Measures</u> |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1. Listed GHS category 2 for reproductive toxicity | |
| 4. Spray application | -12 hour REI & avoid drift |
| 5. Designated by the EPA as slightly toxic to various aquatic species | -Do not apply where runoff is likely to occur or when weather conditions favor drift from treated areas |
| 11. Annual HSA training required for all applicators | -Incorporate HSA training into annual IPM Policy training to keep costs down |



The following alternative herbicides are being considered:

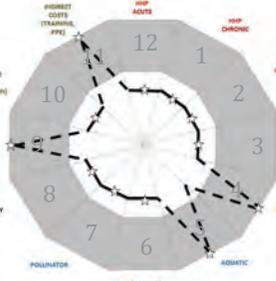
Suppress Herbicide

Active ingredient: caprylic and capric acid
Signal word: Warning
Product label/SDS



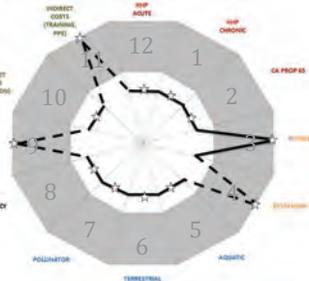
IMOX Herbicide

Active ingredient: ammonium salt of imazamox
Signal word: Caution
Product label/SDS



Esplanade 200 SC

Active ingredient: indaziflam
Signal word: Caution (label) Warning (SDS)
Product label/SDS



Summary Statement: The continued reliance on chemical controls at this location is concerning. Herbicides can be an effective part of an integrated program but it appears that despite various cultural and physical controls being utilized, applications remain routine. Grounds personnel coordinate closely with site staff to ensure youth detainees do not enter treated areas until product labeling allows, but further discussion between departments is warranted to gain a broader consensus on this and alternative tactics.

<p>Recommendations from the IPM Advisory Committee:</p>	<ul style="list-style-type: none"> ○ The Probation Department is encouraged to have a dialog with the IPM Coordinator and representatives from Public Works Facilities Services to identify possible areas for refinement as it pertains to vegetation management at Juvenile Hall. ○ That dialog should prioritize how to utilize the land to promote enhanced landscape stewardship as described above. Discussions should identify and include collaboration with mission-aligned partners. ○ The Public Works Grounds Division is encouraged to initiate a year-long pilot at Juvenile Hall that suspends the use of products containing glyphosate and flumioxazin and alternatively incorporates a trial use of other formulations being used by other public agencies in the region. ○ Public Works Facilities Services is encouraged to assess pavement conditions throughout the Juvenile Hall property and initiate repairs to cracks where nuisance vegetation is currently growing or is likely to grow.
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ⁱ See Table 1 on [UC IPM Pest Notes Publication 7441 Weed Management in Landscapes](#)

ⁱⁱ “Landscape associates people and place. Danish *landskab*, German *landshaft*, Dutch *landschap*, and Old English *landscipe* combine two roots. “Land” means both a place and the people living there. *Skabe* and *schaffen* mean “to shape”; suffixes *-skab* and *-schaft* as in the English “-ship,” also mean association, partnership.” —Anne Whiston Spirn, *The Language of Landscape* (1998)

ⁱⁱⁱ Related Programs in the region: [Roots of Success](#), [Math/Science Nucleus @ Tyson Lagoon](#), [Insight Garden Program at San Quentin State Prison](#), [California State Prisons—Solano & California Medical Facility—Solano](#); Marsh Creek Viticulture & Agriculture Programs, [San Francisco County Jail San Bruno Complex—The Garden Project](#), Federal Correctional Institution—Dublin, Alameda County Juvenile Hall & Camp Sweeney, [City View Farm \(Alameda County Deputy Sheriffs' Activities League—Dig Deep Farms\)](#)

^{iv} Nearby community-based organizations include but not limited to: [Mt. Diablo Audubon Society](#), [Pollinator Posse](#), [Healthy Hearts Institute](#), [Family Harvest Farm](#), [First Generation Farmers](#), [Urban Tilth-North Richmond Farm](#), [Plating Justice--El Sobrante Farm & Orchard](#), [Pogo Park-Richmond](#), [Groundwork Richmond](#), [The Watershed Project](#), and [Civicorps](#).

^v [Contra Costa Resource Conservation District](#)

^{vi} [National Center for Youth Law \(Oakland based\)](#), [Annie E. Casey Foundation's Juvenile Detention Alternatives Initiative](#),

^{vii} The 2011 Public Safety Realignment Act (Assembly Bill 109) placed additional responsibility for Counties to house low level offenders locally, provide post-incarceration supervision, and allocate associated revenues from the state.

^{viii} Contra Costa County Reentry System Strategic Plan for 2018-2023. Mission Statement: *The Contra Costa County reentry system serves as a collaborative partnership that aids individuals, families, and their support system, in achieving successful community reintegration by facilitating access to a continuum of quality services and improving systemic practices.* <https://www.contracosta.ca.gov/DocumentCenter/View/56655/2018-23-Reentry-Strategic-Plan?bidId=>

^{ix} The [County IPM Policy](#) adopts the following University of California Statewide IPM Program definition: “Integrated Pest Management is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.”