

Regulatory Alignment Concept Paper

APPENDIX A

Program Focus Area Graphs

Appendix A: Program Focus Area Graphs

Appendix A maps proposed regulatory pathways as they relate to key processes within each program's four focus areas. The proposals on the maps are identified through the RP numbers. When the RP is provided as entire pathways (e.g., RP1, RP2), this indicates that all RP opportunities within that RP may impact the indicated area on the map. When the RP is provided as a specific opportunity (e.g., RP1a, RP1b), this indicates the specific opportunity identified may impact this area of the map. The order and numbering of the proposals do not indicate prioritization. The maps are organized by program and focus area, as follows:

1. The **Produce Safety Program (PSP)** section maps three RPs related to data and information sharing, two RPs related to program efficiency, four RPs related to program effectiveness, and three RPs related to equity. Specific opportunities, RP10d and RP10e and are not included in the equity map.
2. The **Irrigated Lands Regulatory Program (ILRP)** section maps five RPs related to data and information sharing, three RPs related to program efficiency, four RPs related to program effectiveness, and three RPs related to equity. RP16 is not included in the equity map.
3. The **Confined Animal Facilities (CAF) Program** section maps two RPs related to data and information sharing, two RPs related to program efficiency, two RPs related to program effectiveness, and three RPs related to equity. RP10 is not included in the equity map.
4. The **State Winery Order (SWO)** section maps two RPs related to data and information sharing, two RPs related to efficiency, two RPs related to effectiveness, and two RPs related to equity.

1. Proposed Regulatory Pathways for the Produce Safety Program

Produce Safety Program Data and Information Sharing Map

Exhibit 1 maps the three proposed RPs aimed at improving the exchange of selected data and information. The diagram highlights key data and information sharing activities conducted by the following entities:

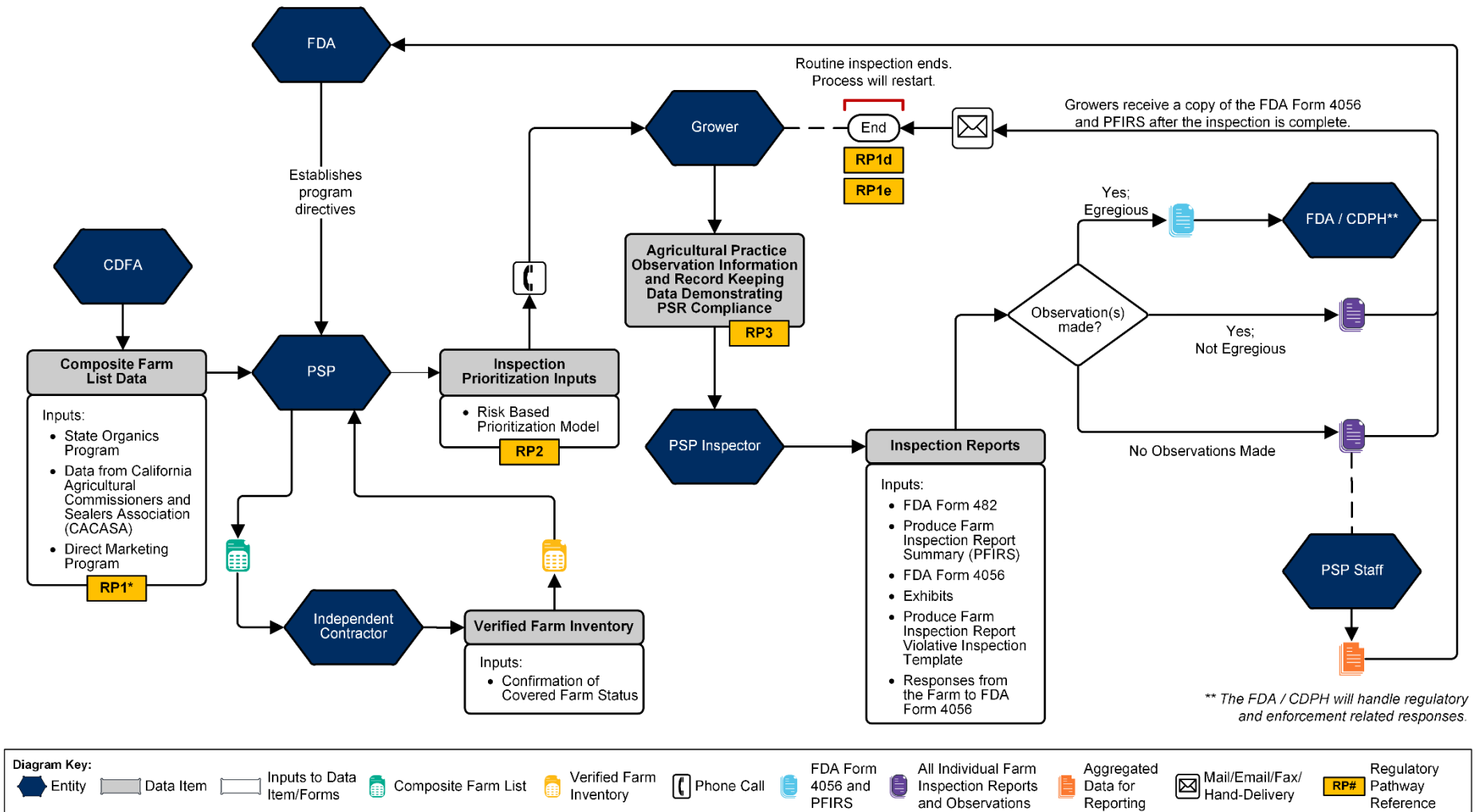
- **FDA:** The FDA establishes regulations and program directives, receives aggregated and farm specific data from the PSP, and receives farm data when FDA Form 4056 inspection observations indicate the inspection is likely to trigger a regulatory response.
- **PSP:** The PSP enforces regulations and implements program directives set by the FDA, reviews three datasets maintained by various CDFA Programs (i.e., State Organics Program, California Agricultural Commissioners and Sealers Association (CACASA), CDFA Direct Marketing Program) to produce a Composite Farm List, and prioritizes farm inspections based on various risk criteria (e.g., whether the farm has been inspected before, farm size, compliance date, harvest season) according to guidelines outlined in the CAP and by FDA.
- **Independent Contractor:** The Independent Contractor supports the development of the Farm Inventory and aids with the farm verification process by confirming grower coverage from the Composite Farm List.
- **PSP Inspector:** PSP Inspectors conduct inspections and document findings. PSP inspectors may provide additional documentation to CDPH and FDA regarding their inspection if observations trigger a regulatory response.
- **Grower:** Growers share information with PSP inspectors that demonstrate their compliance with all required agricultural practices and records with the subparts outlined in PSR (21 CFR 112). Growers will present their on-farm practices and required records during the inspection. A grower receives a report summary of their inspection reports electronically from PSP.
- **California Department of Public Health (CDPH):** The CDPH receives farm-specific data from PSP when FDA Form 4056 inspection observations indicate that an inspection is likely to trigger a regulatory response.

Key Datasets

PSP staff mainly uses in-house spreadsheets using Excel to track program activity (e.g., Farm Inventory, Farm Verification, data entry and aggregation). This type of tracking system requires manual effort to create and update and data entry may be more susceptible to user error than with a centralized system.

PSP staff obtains and combines three key datasets from other agricultural entities (i.e., State Organics Program, California Agricultural Commissioners and Sealers Association (CACASA), and Direct Marketing Program farm lists) to create the Composite Farm List – a compiled list of farms in California. From this dataset, the Independent Contractor conducts farm verification which allows PSP staff to initiate inspection prioritization and scheduling activities. Data is then manually entered into PSP spreadsheets after each inspection, manually aggregated monthly for internal use, and reported to FDA quarterly.

**Exhibit 1
Produce Safety Program
Data and Information Sharing Map**



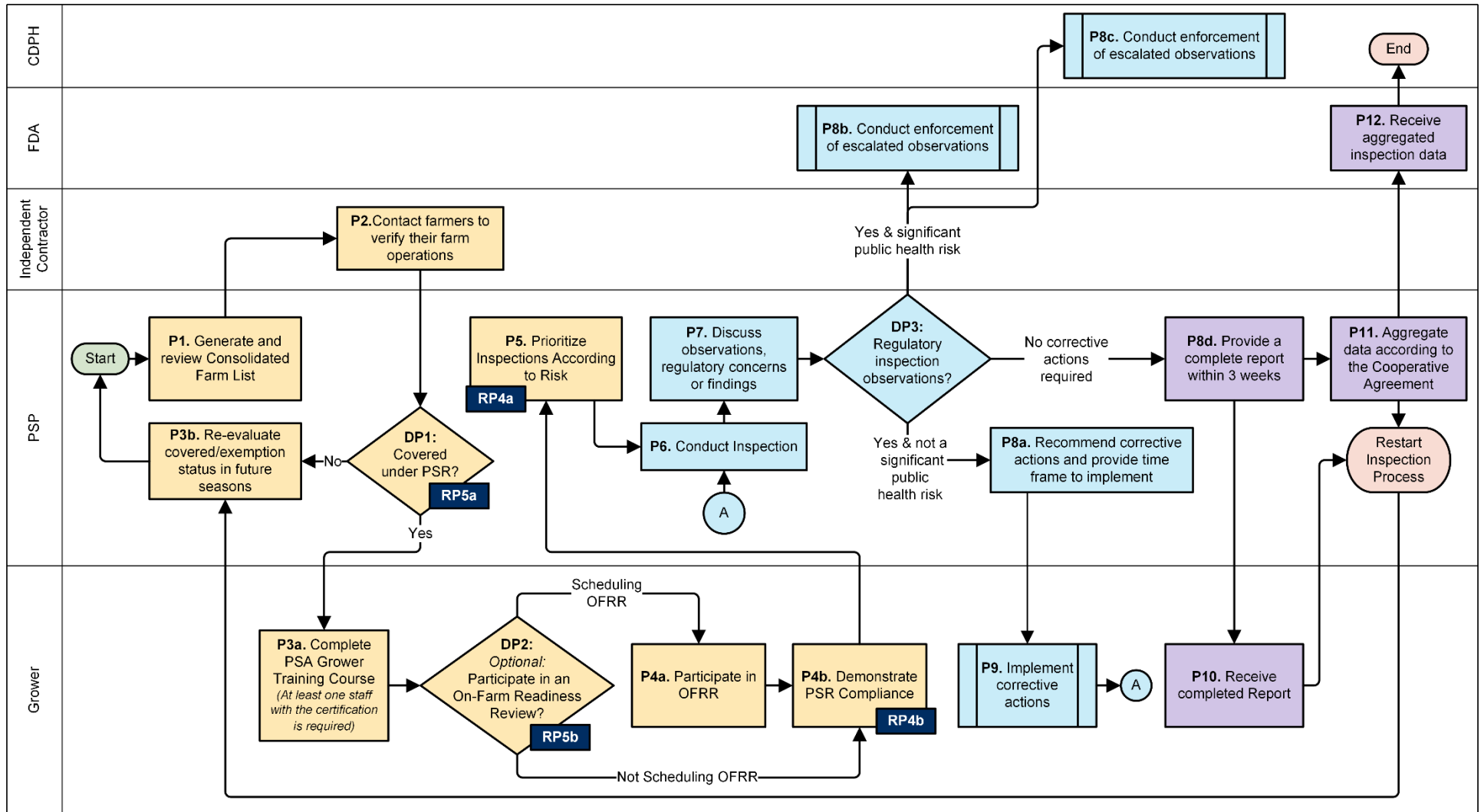
* RP1a – RP1d all have impacts on the Composite Farm Data Inputs. This is denoted by RP1 in the map. In addition to this data input, RP1c and RP1d have additional impacts to the farm re-verification process as specifically denoted in the map. RP1c and RP1d are denote this additional impact of those Specific Opportunities.

Produce Safety Program Efficiencies Map

Exhibit 2 maps two proposed RPs to simplify and expedite PSP-related regulatory, administrative, reporting, and compliance processes. In the map, the square shapes represent the key process steps each entity takes within the program and the diamond shapes represent key decision points. The circled “A” is a reference point to move back to another previous point in the process. The process box with 2 vertical lines represents a sub-process to signify there are additional steps not shown which are carried out by FDA and CDPH. The three main processes are denoted by specific color: “Preparing for an Inspection” is yellow, “Participating in an Inspection” is light blue, and “Concluding an inspection” is purple.

The outline of this current process map assumes that a grower will implement corrective actions, and that these will be accepted by PSP. This map represents an announced inspection for PSP. An unannounced inspection would have fewer touchpoints.

**Exhibit 2
Produce Safety Program
Efficiencies Map**



Produce Safety Program Effectiveness Map

Exhibit 3 maps four proposed RPs to measure PSP performance objectives and goals. The map provides a high-level overview of the connection between FSMA Guidance, PSR Objectives & Subparts, CAP Guidance and Objectives, and measures. Each title represents a layer or facet of the program's structure and implementation. Together they indicate the program's effectiveness by showing how it is informed by law, guided by modern principles, structured by specific rules, implemented through cooperative efforts, and measured against clear performance indicators. This map depicts how the program tracks its effectiveness, considering the following:

- **FSMA Guidance:** Represents the overarching federal legal objectives and requirements regarding food safety that the program is designed to meet. These objectives provide the pillars by which FSMA and the New Era of Food Safety in the country is supported, implemented, and measured.
 - **FSMA:** Refers to the Food Safety Modernization Act (21 U.S.C. § 2201 - 2252). This Act is the FDA's reaction to significant transformations in the global food system. It is coupled with an evolving knowledge of the implications and outcomes of foodborne illnesses. This indicates the regulatory foundation for the program which establishes the overarching legal requirements for food safety that the program is designed to meet.
 - **FDA Foundational Pillars of the New Era of Smarter Food Safety:** Reflects the modern approaches and principles that the program incorporates to ensure it is aligned with current best practices in food safety.
 - **New Era of Smarter Food Safety:** Refers to FDA's "blueprint" for implementing a new approach to food safety by leveraging technology and other tools and approaches to create a safer, traceable, and more digital food safety system.
- **PSR Objectives & Subparts:** Outlines a main objective of the Produce Safety Rule as well as each subpart. These objectives outline what PSR sets out to accomplish as a regulation (i.e., prevent the consumption of contaminated produce) as well as the subparts that define specific requirements and processes to avoid contaminated produce.
 - **PSR:** Refers to the Produce Safety Rule (Chapter 21 Code of Federal Regulations (CFR) Part 112) which establishes science-based minimum standards for safely growing, harvesting, packing, and holding produce grown for human consumption. This rule went into effect to implement FSMA.¹
 - **Produce Safety Rule Subparts:** Subparts described as a specific focus of PSP (Subpart A – F, I, K – L, O).

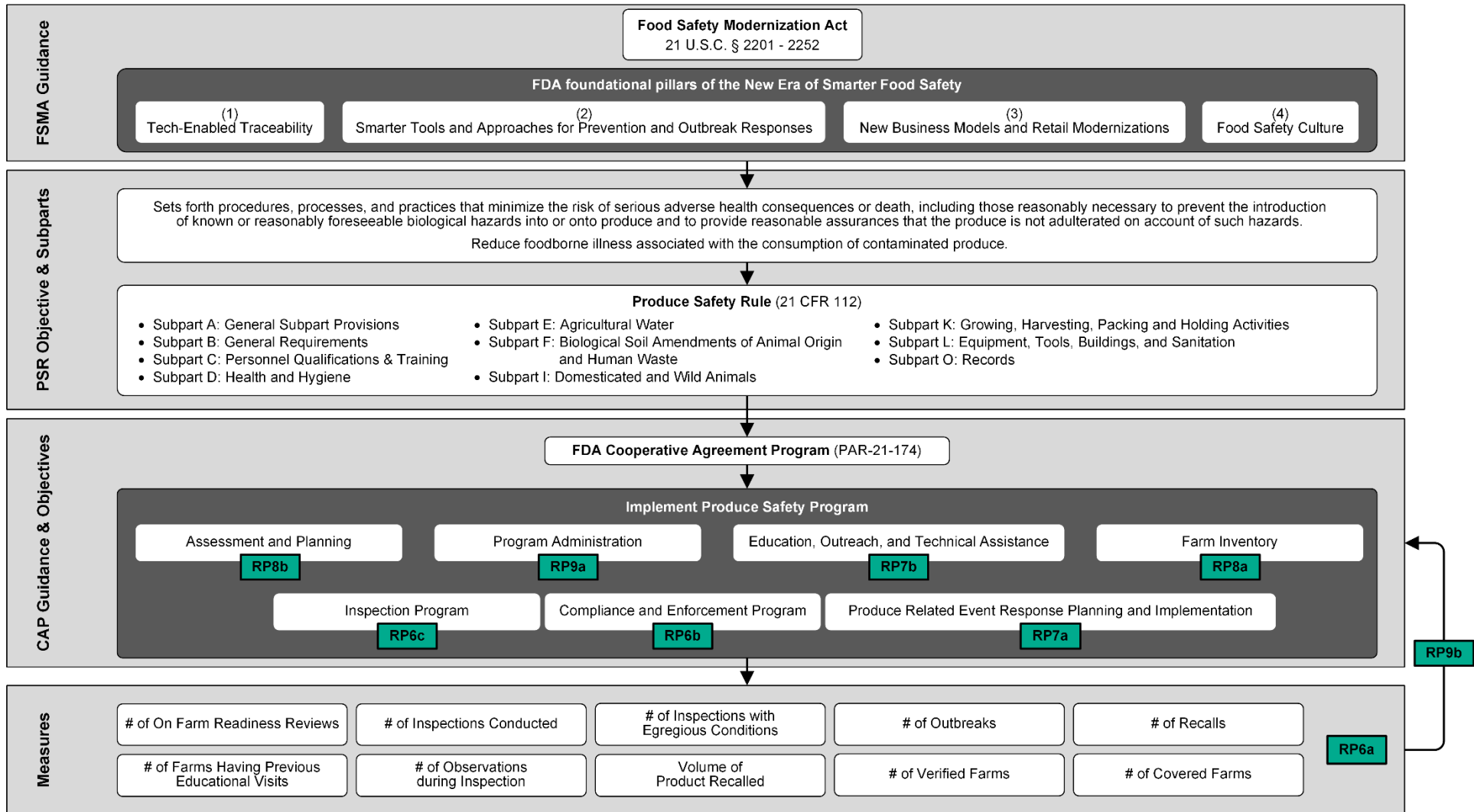
¹ [FSMA on Produce Safety Rule](#)

- **CAP² Guidance & Objectives:** Provides clear technical and financial assistance guidelines to state and territorial agencies, such as CDFA, with the goal of enhancing produce safety and achieving high rates of compliance through local/state/federal coordination. The CAP and its objectives represent a robust, comprehensive framework for implementing a produce safety program at the state level.
 - **Implement Produce Safety Program:** Refers to the state of California implementing a produce safety program as a Path B state under the CAP. This component shows the seven objectives that provide a blueprint for program implementation and performance. These objectives encompass the various aspects of program execution such as administration, education, compliance, and response planning, indicating a comprehensive approach to safety.
- **Measures³:** Lists quantitative metrics used to directly measure the program’s performance, showing how the effectiveness of the program is evaluated based on actual inspection data collected. Through measures such as number of inspections and compliance status per farm, PSP can collect data such as produce farm compliance rates. Program data is reported to the FDA as aggregated totals and is aggregated by inspection period. This data may be used directly to influence program funding.

² CAP refers to the [Cooperative Agreement Program \(PAR 21-174\)](#). According to the CAP, California is a Path B grantee meaning it is a jurisdiction “that will conduct produce safety inspections under FDA’s authority and will complete other applicable program objectives. Path B grantees are responsible for completing all items under Program Objectives 1, 2, 3, 4, 5, 6, and 7.” PSP Objectives refer to the seven Path B objectives described in the CAP.

³ Measures provided do not represent an all-inclusive, exhaustive list. Examples of the types of metrics that the PSP collects as a part of measuring and demonstrating program effectiveness.

**Exhibit 3
Produce Safety Program
Effectiveness Map**



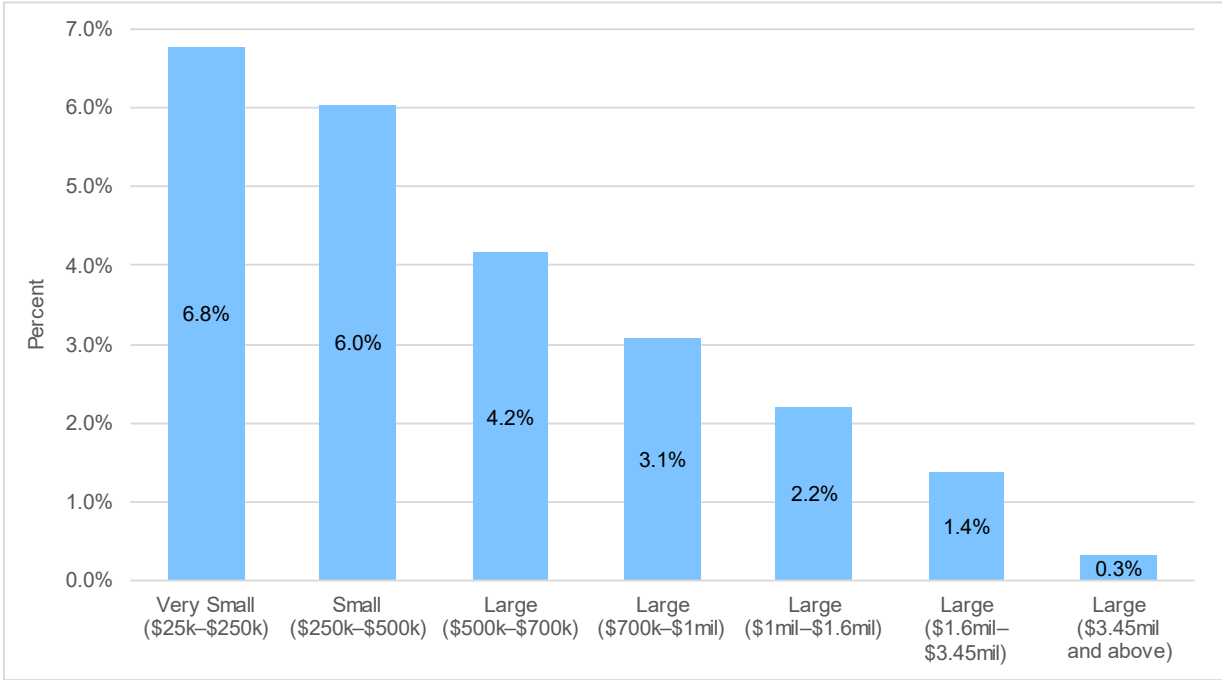
Produce Safety Program Equity Map

Small-scale growers may be disproportionately impacted by the Subparts of FSMA, as illustrated in **Exhibit 4**.⁴ When compared to total farm revenue, the effective costs small farms face in complying with PSR are much greater than the effective costs of their large farm counterparts. Crowe has included this information in the analyses to support an equitable and considerate approach to program administration, planning, assessment, and subsequent evaluation and improvement. Exhibit 28 also depicts Crowe’s examination of USDA’s 2018 cost study on PSR compliance costs. The USDA’s 2018 cost study built on the FDA’s Final Analysis by confirming its assumptions and providing estimates for costs by commodity type and by state.

Exhibit 5 describes examples of small-scale, socially disadvantaged growers’ experiences with PSP. In this subsection, a “small-scale, socially disadvantaged grower” is a farmer or rancher who is a member of a socially disadvantaged group, defined as “a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities.” This is in alignment with the definition of a “Socially Disadvantaged Farmer,” as defined in the Farmer Equity Act of 2017 (AB1348).

Exhibit 6 maps the three proposed RPs to ensure the inclusion of small-scale, socially disadvantaged growers in the development, implementation, and enforcement of PSP inspection activities. The map highlights specific parts of the compliance process that are especially challenging for small-scale, socially disadvantaged growers. Specific opportunities under RP10, RP10d and RP10e, are not included on the map.

Exhibit 4 Estimated Average Cost of Compliance as a Share of Revenue (Percent)

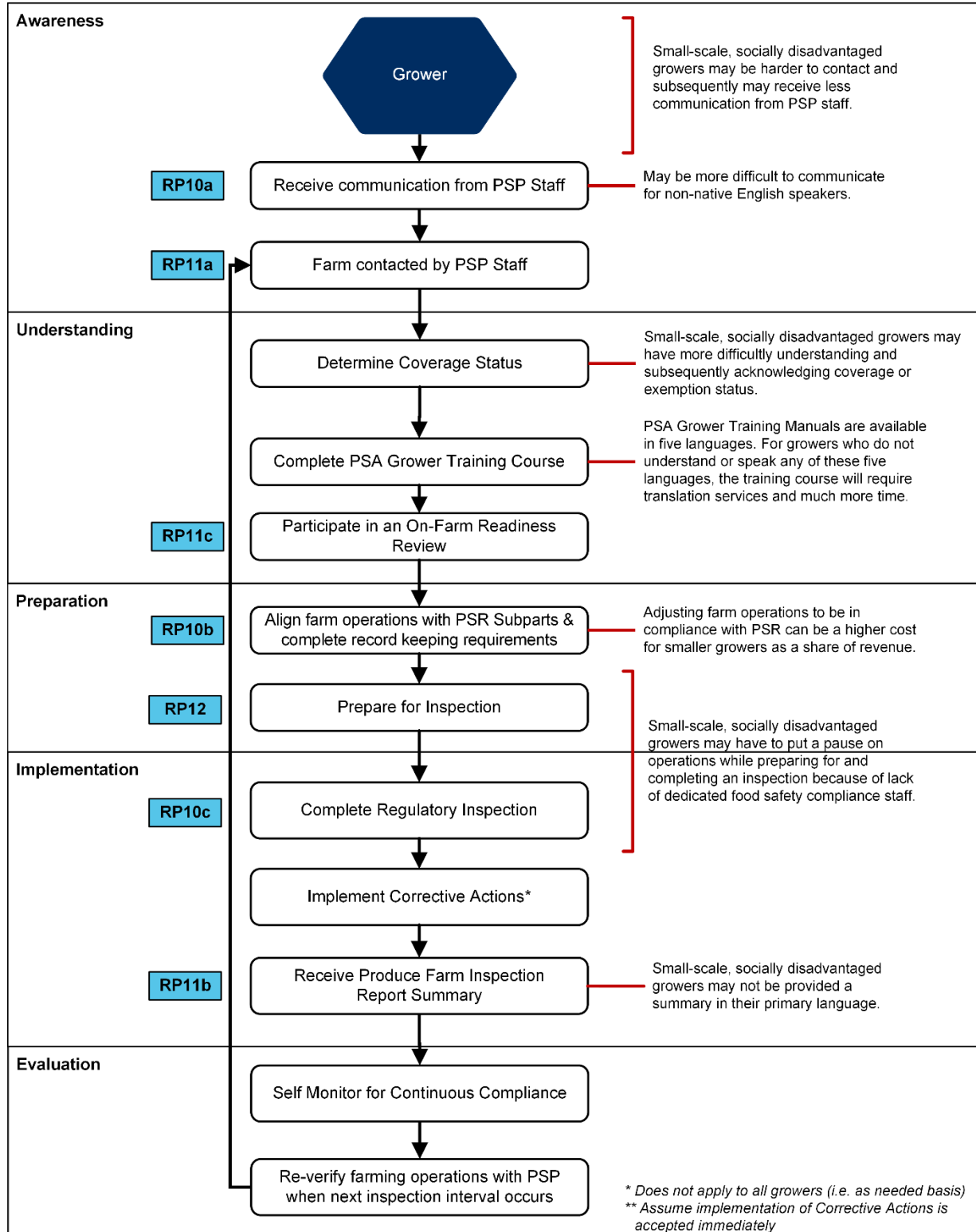


⁴ FDA’s Final Analysis and the USDA’s 2018 cost study do not account for fiscal implications for farms already implementing many of the PSR measures due to compliance with voluntary, third-party audits required by buyers or certified organic requirements as part of the National Organic Program (NOP). The FDA and USDA’s cost estimates may overestimate the cost of PSR compliance as a share for revenue for California producers (i.e., the actual cost of compliance could be lower than these estimates suggest).

Exhibit 5
Produce Safety Program
Examples of Small-Scale, Socially Disadvantaged Growers Experiences

Stage	Experiences
Awareness / Understanding	<ul style="list-style-type: none"> • Small-scale, socially disadvantaged growers are aware of PSP and its goals but lack holistic understanding due to lack of interaction with PSP staff. • Small-scale, socially disadvantaged growers may be harder to contact as result of language and technological barriers and subsequently may receive less communication from PSP. In turn, this can hinder awareness of PSP for such growers. • The complexity of PSR language can make it difficult for small-scale, socially disadvantaged growers to navigate and understand its requirements. • The language and technical jargon used in regulations can be overwhelming, especially for those without specialized knowledge. As a result, these growers may not fully comprehend the purpose and benefits of regulatory programs.
Preparation	<ul style="list-style-type: none"> • Growers expressed difficulty complying with regulations when they are not provided the specific form used in an inspection (e.g., Produce Farm Inspection Report). Without seeing this form, growers find it harder to prepare for inspections and comply with regulations. • Many small-scale, socially disadvantaged growers maintain a strong desire and need for more support from UCCE and other small farm specialty groups in navigating PSR regulations. • Growers also expressed they would benefit from more workshops, training, and presentations in their native language to help with completing forms, adopting best management practices, and maintaining compliance under the program.
Implementation	<ul style="list-style-type: none"> • Networks of peers within small-scale, socially disadvantaged grower communities may use the same individual to help them with food safety audit compliance. This individual may have greater understanding of food safety regulations and the English language and may be a volunteer or a paid consultant. • Small-scale, socially disadvantaged growers expressed that there are limited staff resources on-farm and as a result, many of the staff may have multiple responsibilities pertaining to general farm operation and food safety compliance. Preparation and hosting on-farm audits and inspections may take a grower’s attention away from production activities. Growers expressed challenges with balancing these responsibilities, particularly when competing against large farm operations with dedicated produce safety staff.
Evaluation	<ul style="list-style-type: none"> • For inspections, small-scale, socially disadvantaged growers may have limited availability of staff to prepare for and meet with inspectors. Owners of small operations often are responsible for various tasks, including day-to-day operations and regulatory and administrative duties. This means that they have less time and resources to allocate specifically for preparing for inspections compared to their larger farm counterparts. • Growers may receive minimal communication and outreach from PSP, causing uncertainty of compliant status under PSR between inspection cycles. • Growers experience a higher cost of compliance to comply with PSR requirements as a share of revenue than their larger farm counterparts.

**Exhibit 6
Produce Safety Program
Equity Map**



2. Proposed Regulatory Pathways for the Irrigated Lands Regulatory Program

Irrigated Lands Regulatory Program Data and Information Sharing Map

Exhibit 7 maps five proposed RPs aimed at improving the exchange of selected data and information between state regulatory agencies and programs.

Key Entities

Below, describes how key entities share data and information to meet the ILRP regulatory requirements:

- **Discharger:** Dischargers in water quality coalitions submit enrollment information,⁵ fees, farm evaluation plans (generally every five years), Sediment and Erosion Control plans (if applicable), and Irrigation and Nitrogen Management Plan (INMP) worksheets to their Coalition either through the Coalition-managed portal or through email or mail. Dischargers also submit drinking well data as required for dischargers with on-site wells to Water Boards directly. Some regions use GeoTracker to gather well information and others use email and mail. Some regions have additional reporting requirements for dischargers. For example, the Central Coast Region requires an Annual Compliance Form (ACF).
- **Coalition:** Coalitions provide membership lists, fee payments, Farm Evaluation Summary reports, INMP Summary reports, and Annual Reports to the Water Boards. Annual reports are a cumulation of information received by discharger coalition members that have been aggregated and summarized. Coalitions need to be approved by the Regional Water Board. There are 26 approved coalitions currently part of ILRP.
- **Laboratories (Labs):** Laboratories often submit monitoring data to the Water Boards on behalf of dischargers or coalitions. This includes groundwater monitoring data, which is submitted directly to GeoTracker, and surface water monitoring data, which is submitted directly to California Environmental Data Exchange Network (CEDEN). For simplicity, the map does not include laboratories.
- **Water Boards:** Water Boards collect and manage data from dischargers and coalitions. Water Boards enter data into their internal Electronic Content Management (ECM) system or other databases for storage and case management tracking and follow-up.
- **Partners:** Partners, such as CDFA, Department of Water Resources (DWR), Department of Pesticide Regulation (DPR), Counties, and County Agricultural Commissioners (CAC), coordinate with Water Boards through email or a secure file transfer to share relevant data (e.g., enrollment verification information).
- **Public:** The public can access publicly available data through CIWQS, GeoTracker, and CEDEN. They can also request data from Water Boards through the Public Records Act (PRA) via email or secure file transfer.

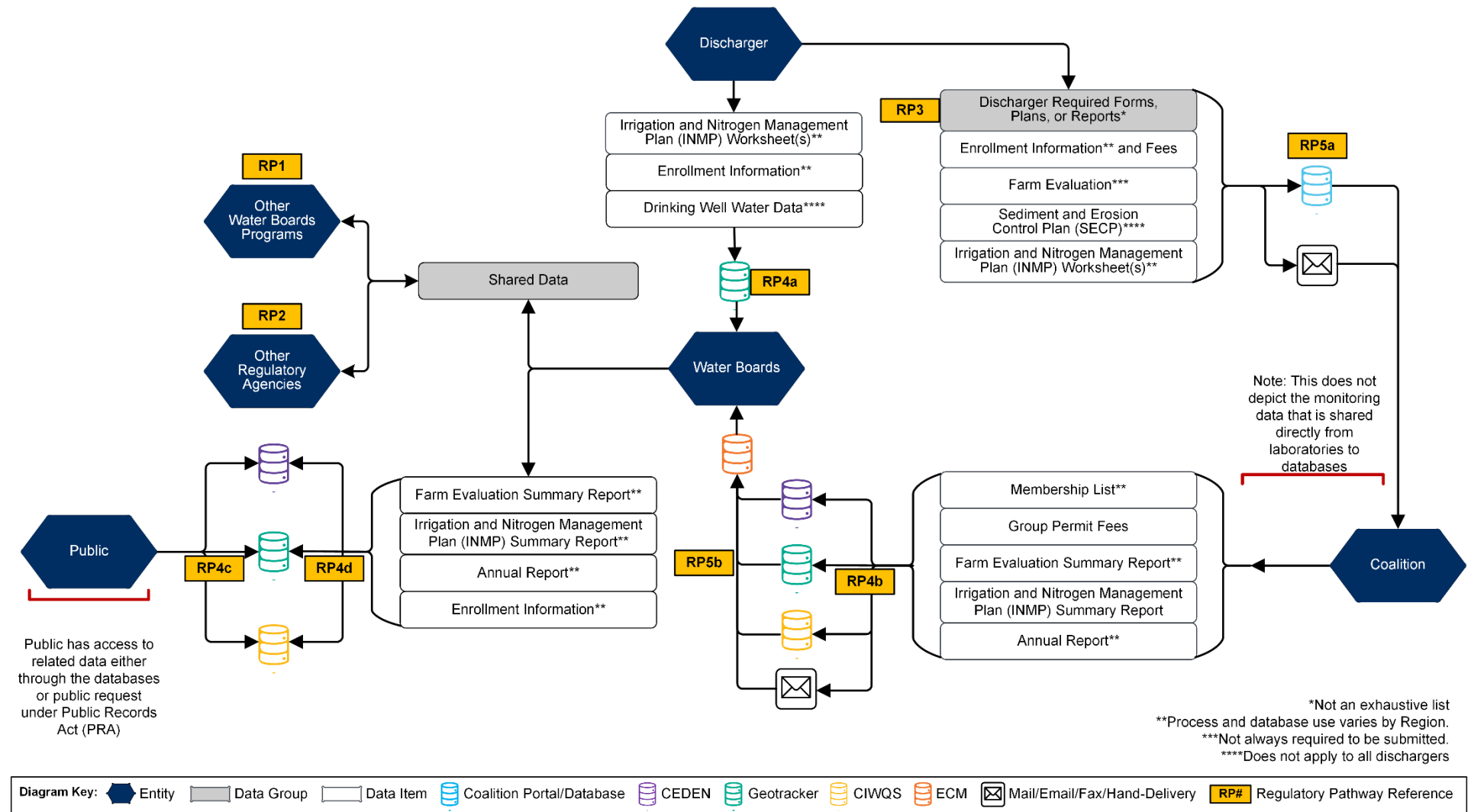
⁵ Some dischargers may need to submit enrollment information directly to GeoTracker, despite being a Coalition member.

Key Databases

ILRP uses several databases for collection of data and information across the program. Each Regional Water Board has their own process and database used for collection of data and information. For example, the Central Coast Region requires dischargers to use GeoTracker for all reporting. However, for many other regions, GeoTracker is only for enrollment, with reports submitted through the Coalitions by mail, email, or electronic file transfer. Key databases within ILRP include:

- **Coalition Portals:** Coalition owned and/or managed portals or databases used to collect information from dischargers participating as a coalition member. This information could include membership applications, farm evaluations, INMP worksheets, and more. Sometimes coalitions work closely with third-party technology consultants for implementation and maintenance of the portals. Not at all coalitions have developed portals or databases.
- **GeoTracker:** Water Boards typically use GeoTracker to track compliance data, regulatory data, and statewide environmental data. The site includes a relational database, compliance reporting, and GIS interface. GeoTracker is a public database that provides online access to ILRP enrollment information.
- **California Environmental Data Exchange Network (CEDEN):** Water Boards use CEDEN to store water quality data about California surface waters, which includes information on toxicity, chemistry, field collections, tissue, and bioassessments. CEDEN is a public database that provides online access to ILRP water quality sampling results.
- **California Integrated Water Quality System (CIWQS):** Water Boards use CIWQS to track permits and orders, track inspections, coordinate billing, and manage violations and enforcement activities. CIWQS is a public database that provides online access to ILRP enrollment, violation, and enforcement information.
- **Electronic Content Management (ECM):** Water Boards use ECM as an internal case and content management database to track enrollee information, compliance, and regulatory data.

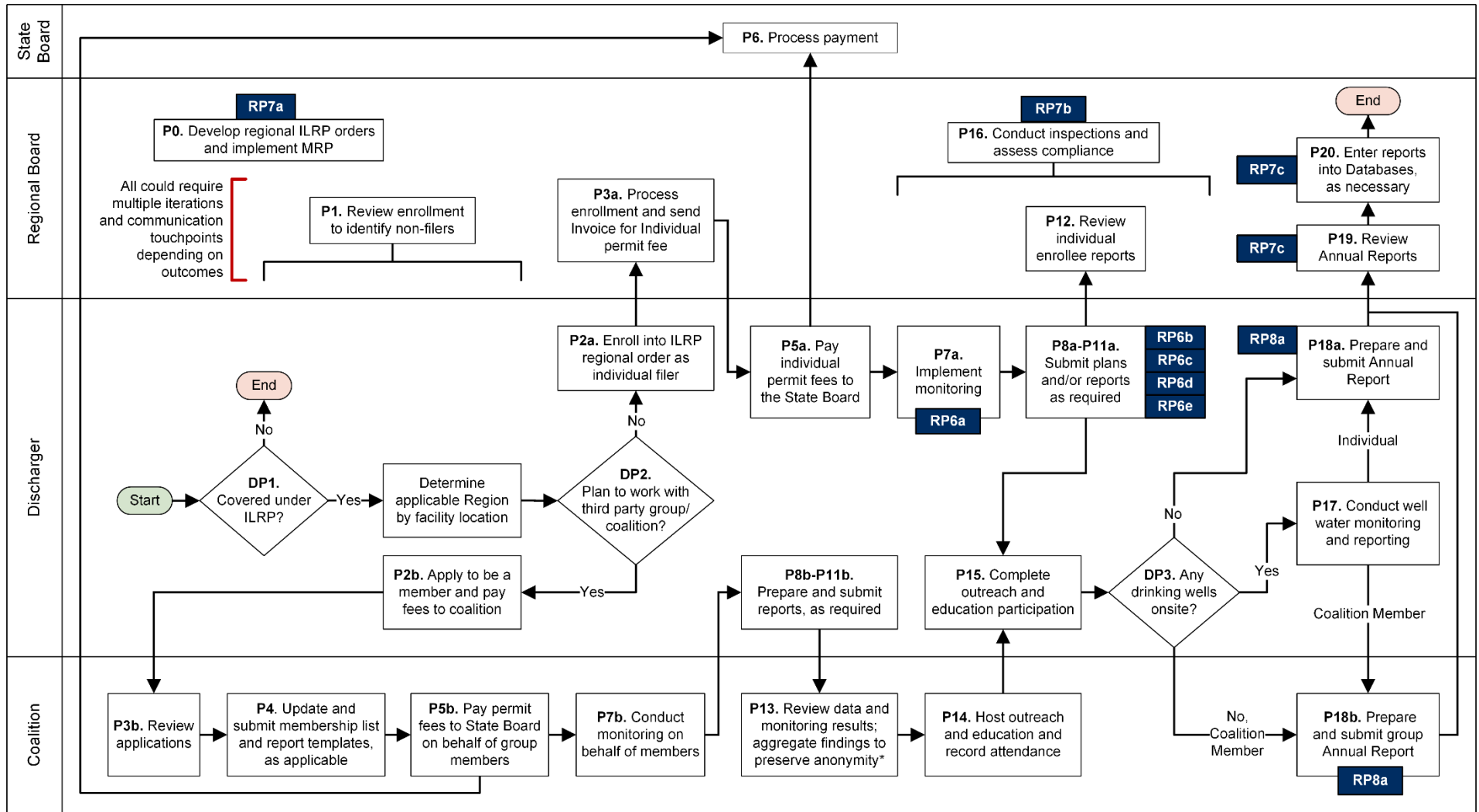
**Exhibit 7
Irrigated Lands Regulatory Program
Data and Information Sharing Map**



Irrigated Regulatory Lands Program Efficiencies Map

Exhibit 8 maps the three proposed RPs to simplify and expedite ILRP related regulatory administrative, reporting, and compliance processes. In the map, the square shapes represent the key processes within the program and the diamond shapes represent the key decision points. The map includes information on key processes conducted by the State Water Board, Regional Water Board, dischargers, and coalitions. Process paths for dischargers may vary depending on region, facility characteristics, or whether they are participating as a coalition member. The process map does not include laboratory activities, which may add additional touchpoints for analysis of water and wells or the termination process.

**Exhibit 8
Irrigated Lands Regulatory Program
Efficiencies Map**



* Not every report or Region allows anonymous reporting.

Irrigated Regulatory Lands Program Effectiveness Map

Exhibit 9 maps the four proposed RPs to measure ILRP performance objectives and goals. In the map, Crowe provides a high-level overview of the connection between state and federal regulations, policies, and guidance to ILRP objectives, practices, and measures. The components of this diagram collectively signal the program's effectiveness and support regulatory alignment by creating a structured framework that integrates legal and policy guidance, strategic objectives, actionable practices, measurable outcomes, and performance indicators.

- **Guidance**

- **Alignment with State and Federal Regulations:** Guidance from state and federal regulations are essential for developing the basis of an effective program. These state and federal regulations include but are not limited to: State Porter-Cologne Water Quality Control Act (Porter-Cologne, CWC §13000 et seq), California Environmental Quality Act (CEQA, PRC § 21000-21178), California Safe Drinking Water Act (CWC §106.3), and Federal Clean Water Act (33 USC §1251 et seq).
- **Alignment with State Policies and Plans:** In addition to state and federal regulations, the state policies and plans provide additional guidance to the development, implementation, and enforcement of the ILRP. Key policies and plans that inform ILRP include but are not limited to: Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), Water Quality Enforcement Policy, Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy, Resolution 68-16), California Ocean Plan, and others.
- **Alignment with Regional Plans:** An effective ILRP should align with regional plans, such as the Water Quality Control Plans (Regional Basin Plans) which provide numeric and narrative water quality objectives and beneficial uses, the Bay-Delta Plan, and others.
- **Aligning with US EPA Guiding Questions:** The US EPA provides guidance to all state monitoring programs through its paper titled, "Elements of a State Water Monitoring and Assessment Program." In the paper, the US EPA provides five guiding questions that all state monitoring programs should be able to answer to be in alignment with expectations and objectives of the Clean Water Act.
- **Objectives:** For discussion purposes, Crowe gathered ILRP objectives from the 2010 Irrigated Lands Regulatory Program Long-Term Program Development, Staff Report. These objectives should be in alignment with the federal, state, and regional guidance and should provide goals for tracking program progress.

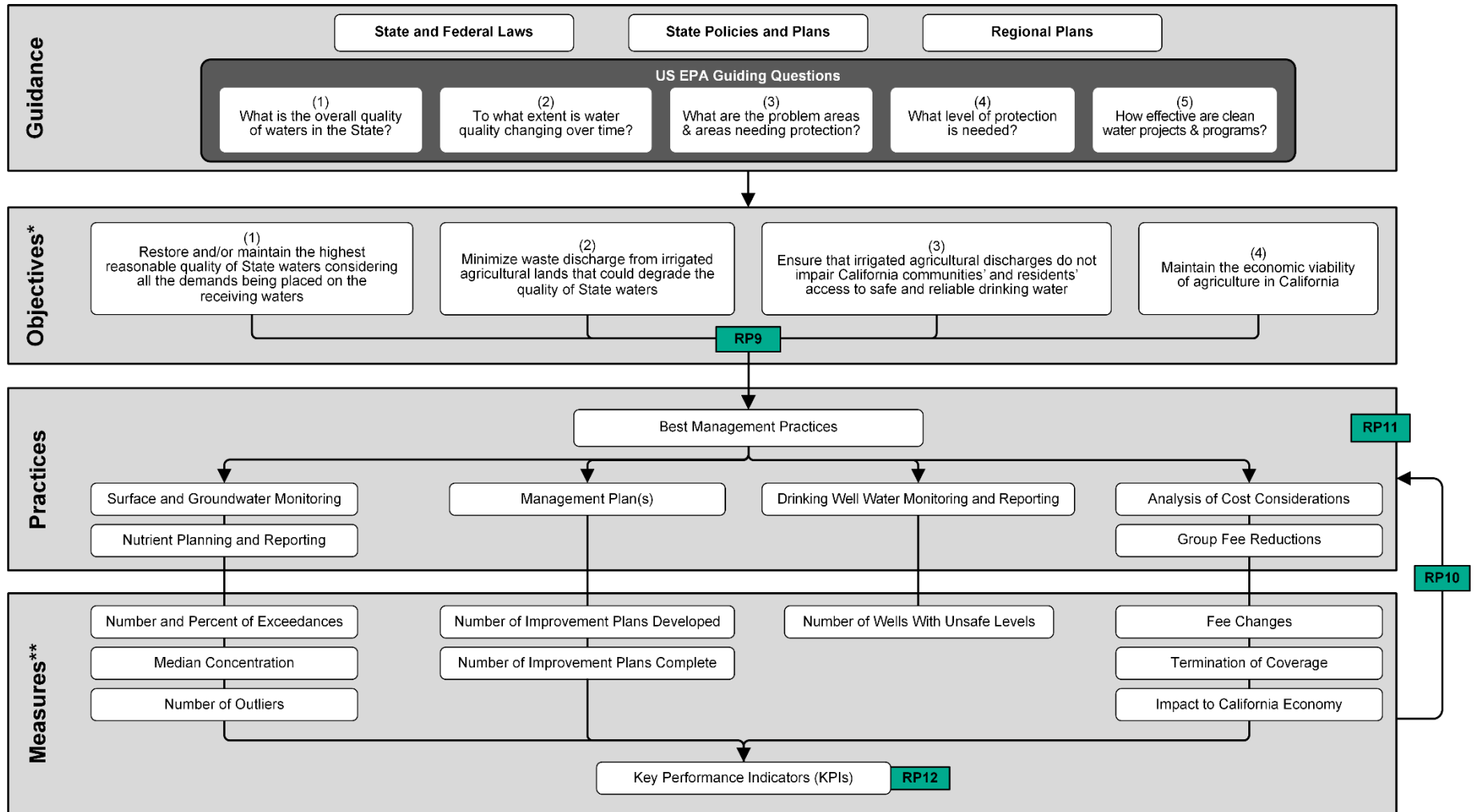
- **Practices**

- **Best Management Practices (BMPs):** BMPs provide tangible actions that dischargers and/or coalitions should take to achieve ILRP objectives. BMPs should be constantly evaluated and updated to improve program effectiveness and meet current regulatory objectives.
- **Monitoring and Reporting:** Monitoring and reporting practices describe the key monitoring and reporting activities dischargers and/or coalitions may be completing in support of ILRP objectives.
- **Program Design:** Program design components such as group fee reductions for participating in a coalition or analysis of cost considerations describe the key attributes of the program in support of the third ILRP objective.

- **Measures:** The measures provide specific examples of key data points that can be used to assess compliance with regulations and the effectiveness of the BMPs.

- **Key Performance Indicators (KPIs):** KPIs provide quantifiable benchmarks for the program's performance, allowing for evaluation against regulatory standards and objectives. The current KPIs for ILRP are aligned with the FY performance reports on program enrollment statistics.

**Exhibit 9
Irrigated Lands Regulatory Program
Effectiveness Map**



* For analysis purposes, Crowe used the program objectives as stated in the Irrigated Lands Regulatory Program Long-Term Program Development, Staff Report, 2010

** Not an exhaustive list

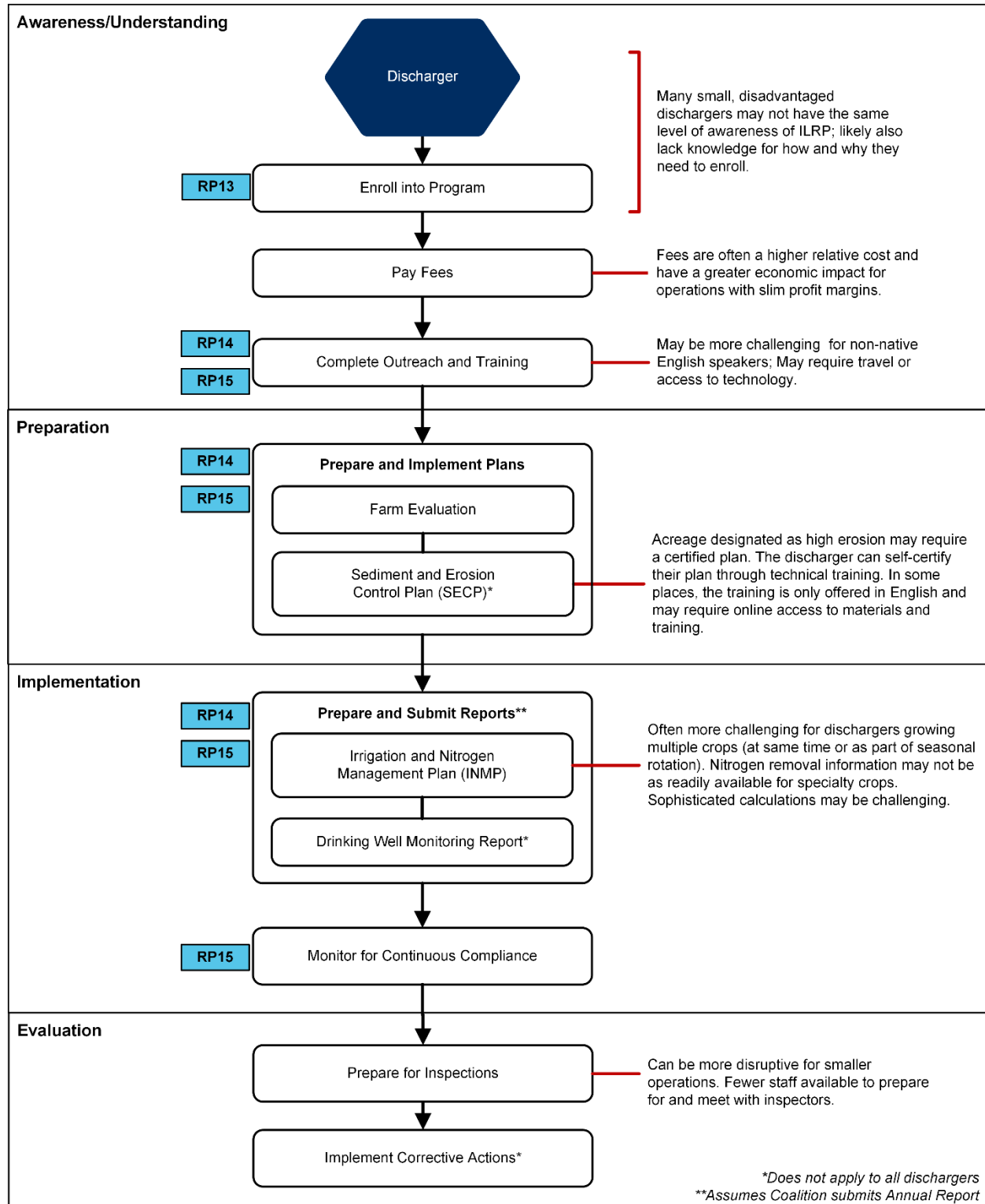
Irrigated Regulatory Lands Program Equity Map

Exhibit 10 describes examples of small-scale, socially disadvantaged dischargers’ experiences with ILRP. **Exhibit 11** maps the three of the four proposed RPs to ensure the inclusion of small-scale, socially disadvantaged dischargers in the development, implementation, and enforcement of ILRP regulations. In the map, Crowe aims to highlight specific parts of the compliance process that are especially challenging for small-scale, socially disadvantaged dischargers. RP16 is not included on the map.

**Exhibit 10
Irrigated Lands Regulatory Program
Examples of Small-Scale, Socially Disadvantaged Discharger Experiences**

Stage	Experiences
Awareness / Understanding	<ul style="list-style-type: none"> • Small-scale, socially disadvantaged dischargers often lack awareness of ILRP. In many cases, these dischargers have limited resources and access to information, making it challenging for them to stay informed about regulatory programs like ILRP. They may not have the same level of exposure to industry networks, conferences, or training opportunities that larger entities may have. • Many small-scale, socially disadvantaged dischargers may face socioeconomic barriers, such as language barriers or limited educational opportunities, which further hinder their awareness of ILRP. • The language and technical jargon used in regulations can be overwhelming, especially for those without specialized knowledge or legal expertise. As a result, these dischargers may not fully comprehend the purpose and benefits of regulatory programs.
Preparation	<ul style="list-style-type: none"> • Many small-scale, socially disadvantaged dischargers maintain a strong desire and need for more support from UCCE and other small farm specialty groups in navigating ILRP regulations. For example, many need one-on-one assistance with filling out INMP worksheets and calculating total nitrogen applied and removed. • Dischargers also expressed they would benefit from more workshops, training, and presentations in their native language to help with report preparation, best management practices, and compliance under the program.
Implementation	<ul style="list-style-type: none"> • Small-scale, socially disadvantaged dischargers face unique circumstances due to their diverse crop range, limited resources, and language barriers. In some cases, compliance with the requirements is especially time-consuming. For example, dischargers must complete an INMP worksheet for each crop. If done on paper instead of through an electronic portal, this could be up to 80 different worksheets, depending on the number of crops rotated through their cropping seasons. • Many small-scale, socially disadvantaged dischargers struggle with technology and computer literacy, making it difficult to comply with submitting forms and documents online to confirm compliance with regulatory requirements.
Evaluation	<ul style="list-style-type: none"> • For inspections, small-scale, socially disadvantaged dischargers may have limited availability of staff to prepare for and meet with inspectors. In smaller operations, there may be fewer employees dedicated solely to regulatory compliance. Instead, staff members or the owners themselves often serve in multiple roles and are responsible for various tasks, including day-to-day operations, customer service, and administrative duties. This means that they have less time and resources to allocate specifically for preparing for inspections. • Small-scale, socially disadvantaged dischargers often have limited financial and technical resources. They may lack the funds to invest in necessary upgrades or improvements to address identified issues. Limited access to capital, technology, and expertise can make it difficult for them to implement recommended corrective actions.

**Exhibit 11
Irrigated Lands Regulatory Program
Equity Map**



3. Proposed Regulatory Pathways for the Confined Animal Facilities Program

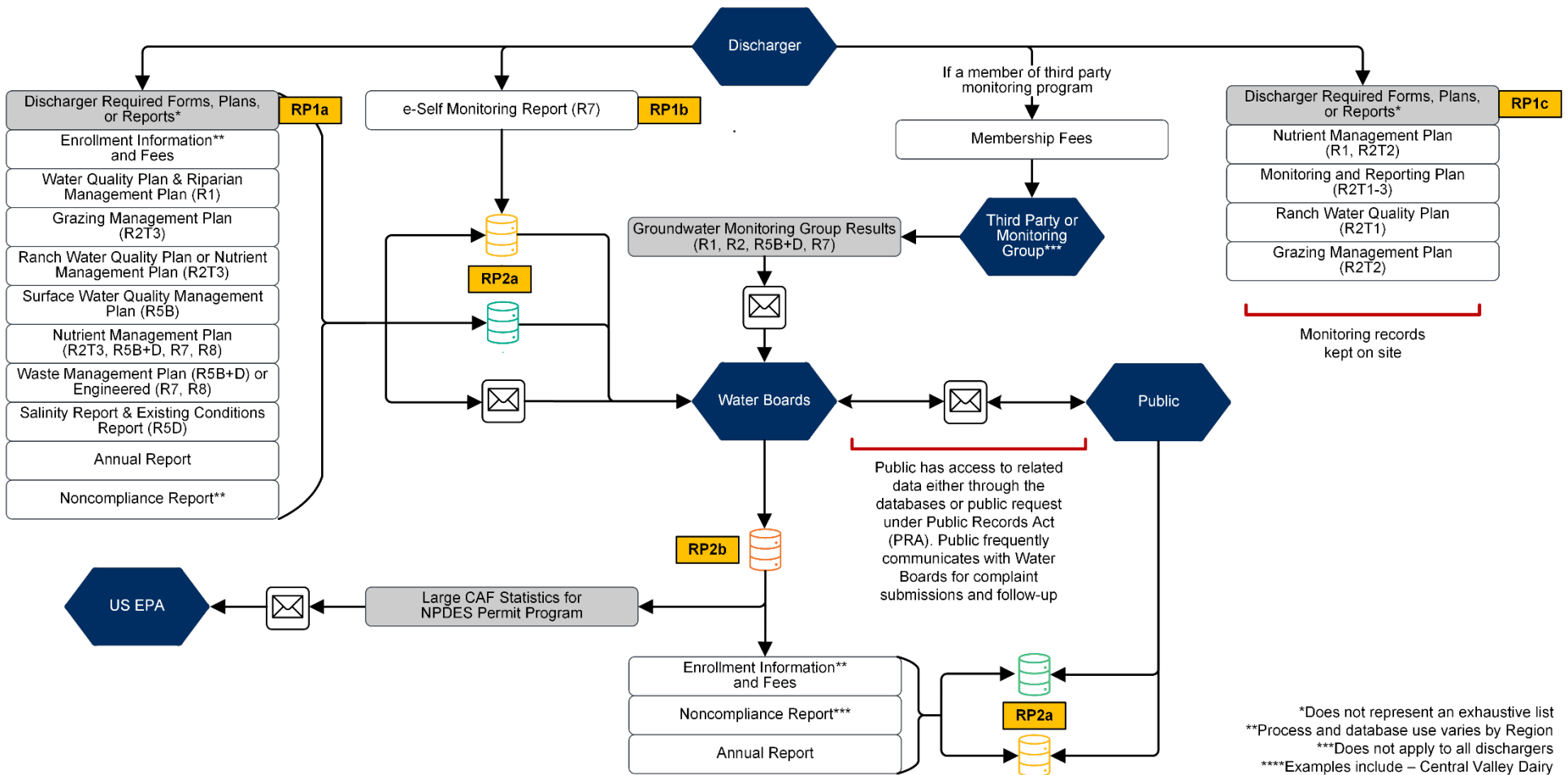
Confined Animal Facilities Program Data and Information Sharing Map

Exhibit 12 maps two proposed RPs aimed at improving the exchange of selected data and information between state regulatory agencies and programs. In the map, Crowe identifies specific plans, reports, and data required under specific regional orders. These are identified within the diagram utilizing the following format – Region denoted by “R” and Tier denoted as “T,” where applicable. “D” and “B” respectively refer to the Central Valley Region’s Dairy and Bovine WDRs. In the map, Crowe highlights the key data and information shared between the following entities:

- **Discharger:** The reports and plans required from dischargers can vary depending on their facility. Some management plans are kept on-site for inspections, while others, such as enrollment information, permit fees, and certain plans, need to be submitted to the Water Boards via email/mail or through a database.
- **Third-Party Representative Monitoring Group:** If the discharger is participating in a third-party representative monitoring group, such as the Central Valley Dairy Representative Monitoring Program, they may be required to submit membership fees in return for groundwater monitoring support and reporting. The role of these monitoring groups is much less extensive than the ILRP coalitions which support dischargers in surface water reporting, INMP reporting, education and outreach, and fee collection.
- **Water Boards:** Water Boards collect and manage data from both third-party monitoring groups and dischargers, entering it into their internal ECM.
- **US EPA:** Water Boards shares information on large CAFs⁶ with US EPA for the National Pollutant Discharge Elimination System (NPDES) permit program.
- **Public:** The public can access publicly available data (e.g., enrollment information, and aggregated monitoring and reporting data) through CIWQS, GeoTracker, and CEDEN. They can also request data from Water Boards through the Public Records Act (PRA) via email or secure file transfer. The public may also communicate directly with the Water Boards regarding complaints.

⁶ As defined by the Federal Government in 40 CFR §122.23.

**Exhibit 12
Confined Animal Facilities Program
Data and Information Sharing Map**



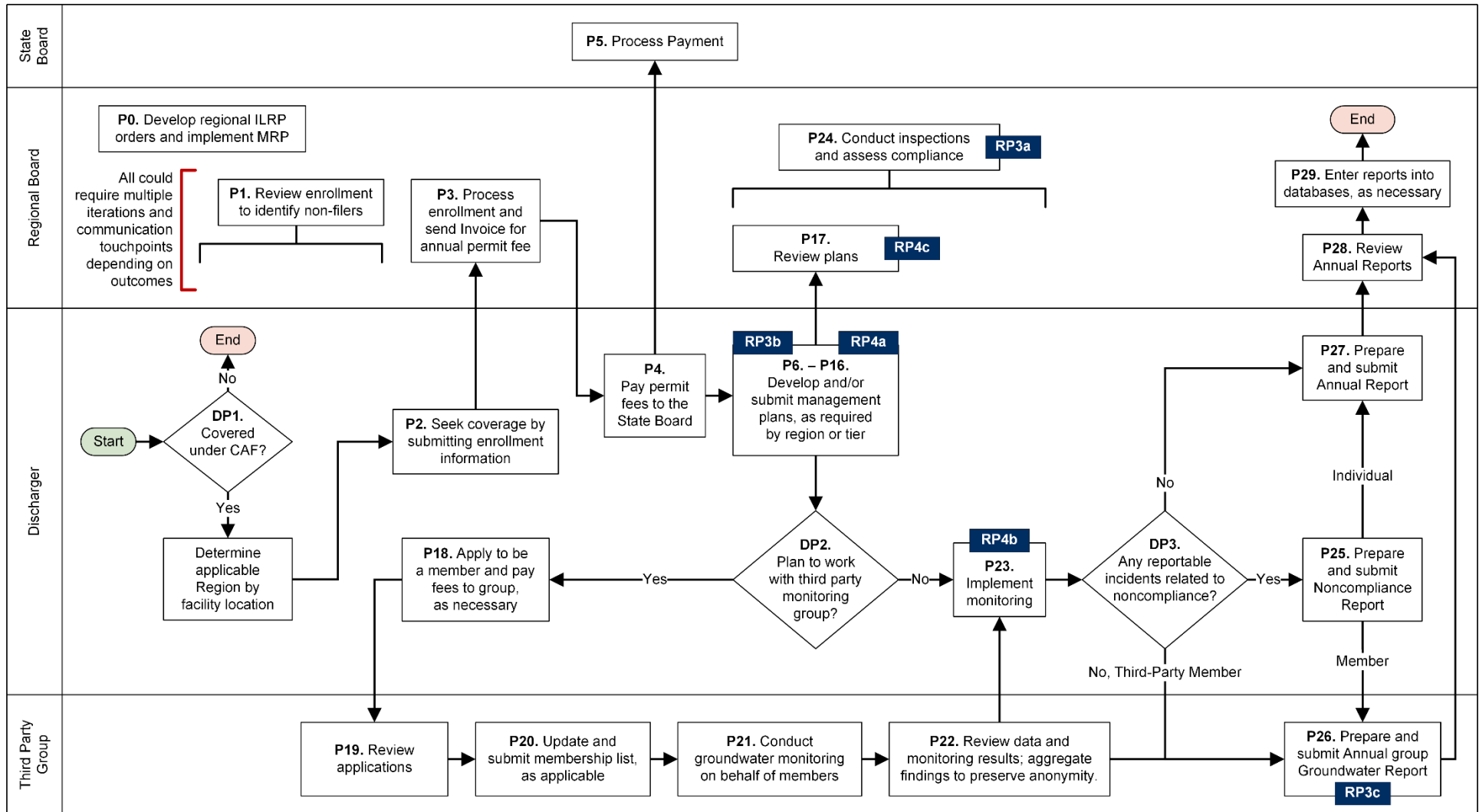
*Does not represent an exhaustive list
 **Process and database use varies by Region
 ***Does not apply to all dischargers
 ****Examples include – Central Valley Dairy Representative Monitoring Program, Sonoma County Farm Bureau, etc.

Diagram Key: Entity (Blue hexagon), Data Group (Grey rectangle), Data Item (White rectangle), Geotracker (Blue cylinder), CIWQS (Yellow cylinder), ECM (Orange cylinder), Mail/Email/Fax/Hand-Delivery (Envelope icon), RP# Regulatory Pathway Reference (Yellow box with black text)

Confined Animal Facilities Program Efficiencies Map

Exhibit 13 maps the two proposed RPs to simplify and expedite the CAF Program related regulatory administrative, reporting, and compliance processes. The map includes information on key processes carried out by State Water Board, Regional Water Board, dischargers, and third-party monitoring groups. Process paths for dischargers may vary depending on region, facility characteristics or whether participating as a member of third-party monitoring group. Process paths for dischargers may vary depending on region, facility characteristics or whether participating as a member of third-party monitoring group. The process map does not include laboratory activities, which may add additional touchpoints for analysis of water and well samples. In addition, the process map does not include the termination process.

**Exhibit 13
Confined Animal Facilities Program
Efficiencies Map**



Confined Animal Facilities Program Effectiveness Map

Exhibit 14 maps the two proposed RPs to measure CAF Program performance objectives and goals. In the map, Crowe provides a high-level overview of the connection between state and federal regulations, policies, and guidance to CAF Program objectives, practices, and measures. The components of this diagram collectively signal the program's effectiveness and support regulatory alignment by creating a structured framework that integrates legal and policy guidance, strategic objectives, actionable practices, measurable outcomes, and performance indicators. Below, Crowe describes how each component contributes to demonstrating the program's effectiveness and regulatory alignment:

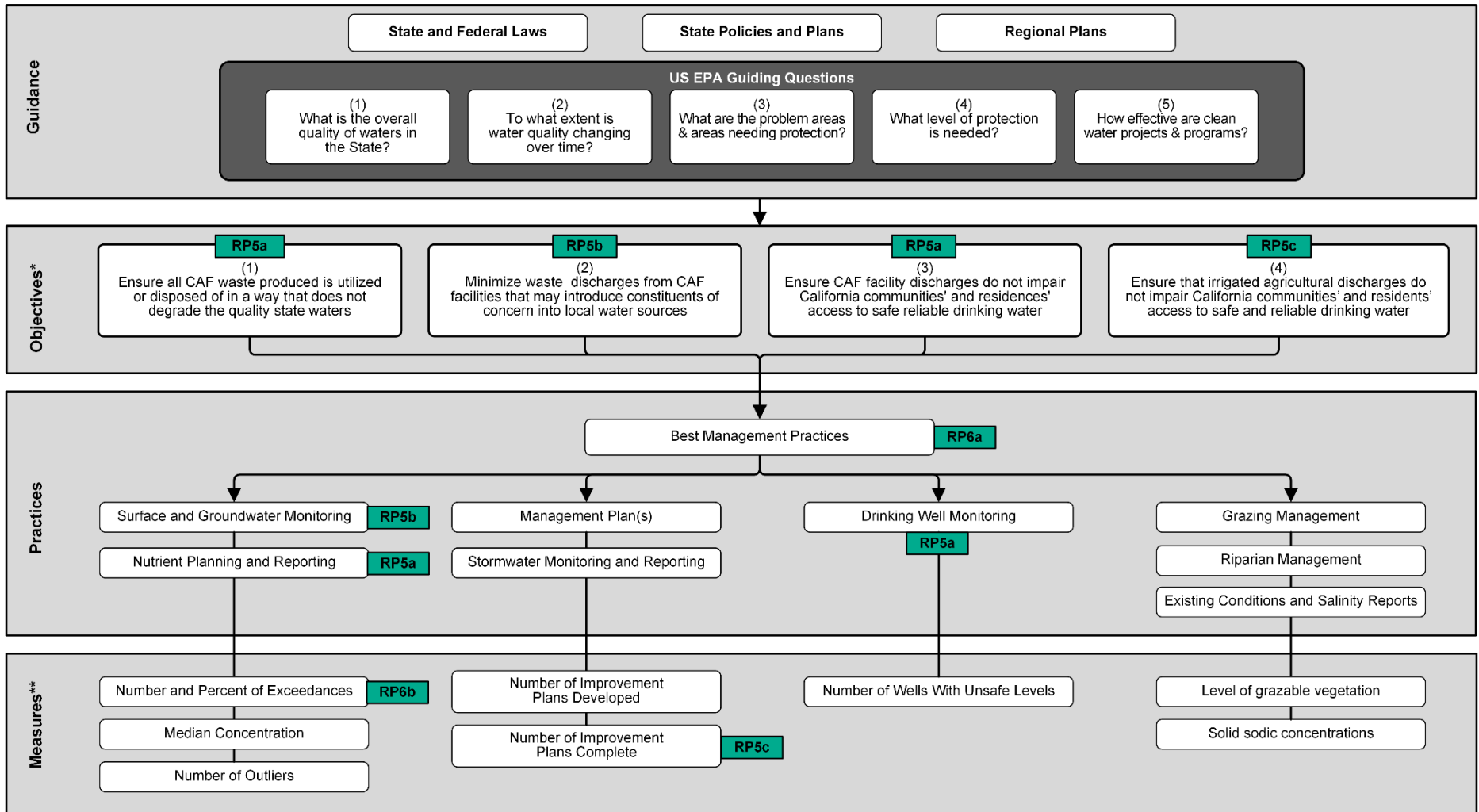
- **Guidance**

- **Alignment with State and Federal Regulations:** These regulations are the underlying framework which governs water quality in California and lays out the need for effectiveness standards for all water quality acts in California. These state and federal regulations include but are not limited to: State Porter-Cologne Water Quality Control Act (Porter-Cologne, CWC §13000 et seq), California Environmental Quality Act (CEQA, PRC § 21000-21178), California Safe Drinking Water Act (CWC §106.3), and Federal Clean Water Act (33 USC §1251 et seq).
- **Alignment with State Policies and Plans:** In addition to state and federal regulations, the state policies and plans provide additional guidance to the development, implementation, and enforcement of the CAF Program. Key policies and plans that inform the CAF Program include but are not limited to: Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), Water Quality Enforcement Policy, Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy, Resolution 68-16), California Ocean Plan, and others.
- **Alignment with Regional Plans:** An effective CAF Program should align with regional plans, such as the Water Quality Control Plans (Regional Basin Plans) which provide numeric and narrative water quality objectives and beneficial uses, the Bay-Delta Plan, and others. These objectives and beneficial uses can then be used as a measure to gauge program effectiveness.
- **Aligning with US EPA Guiding Questions:** The US EPA provides guidance to all state monitoring programs through its paper titled, "Elements of a State Water Monitoring and Assessment Program." In the paper, the US EPA provides five guiding questions that all state monitoring programs should be able to answer to be in alignment with expectations and objectives of the Clean Water Act.
- **Objectives:** For discussion purposes, Crowe gathered CAF Program objectives from State Water Board's Confined Animal Facilities Regulations Handout. These objectives should be in alignment with the federal, state, and regional guidance and should provide goals for tracking program progress.

- **Practices**

- **Best Management Practices (BMPs):** BMPs provide tangible actions dischargers and/or coalitions should take to achieve CAF Program objectives. BMPs should be constantly evaluated and updated to improve program effectiveness and meet current regulatory objectives.
 - **Monitoring and Reporting:** Monitoring and reporting practices describe the key monitoring and reporting activities dischargers and/or coalitions may be completing in support of CAF Program objectives.
- **Measures:** The measures provide specific examples of key data points that can be used to assess compliance with regulations and the effectiveness of the BMPs.

**Exhibit 14
Confined Animal Facilities Program
Effectiveness Map**



* For analysis, purposes, Crowe gathered program objectives from the State Water Board's [Confined Animal Facilities Regulations Handout](#)

** Not an exhaustive list

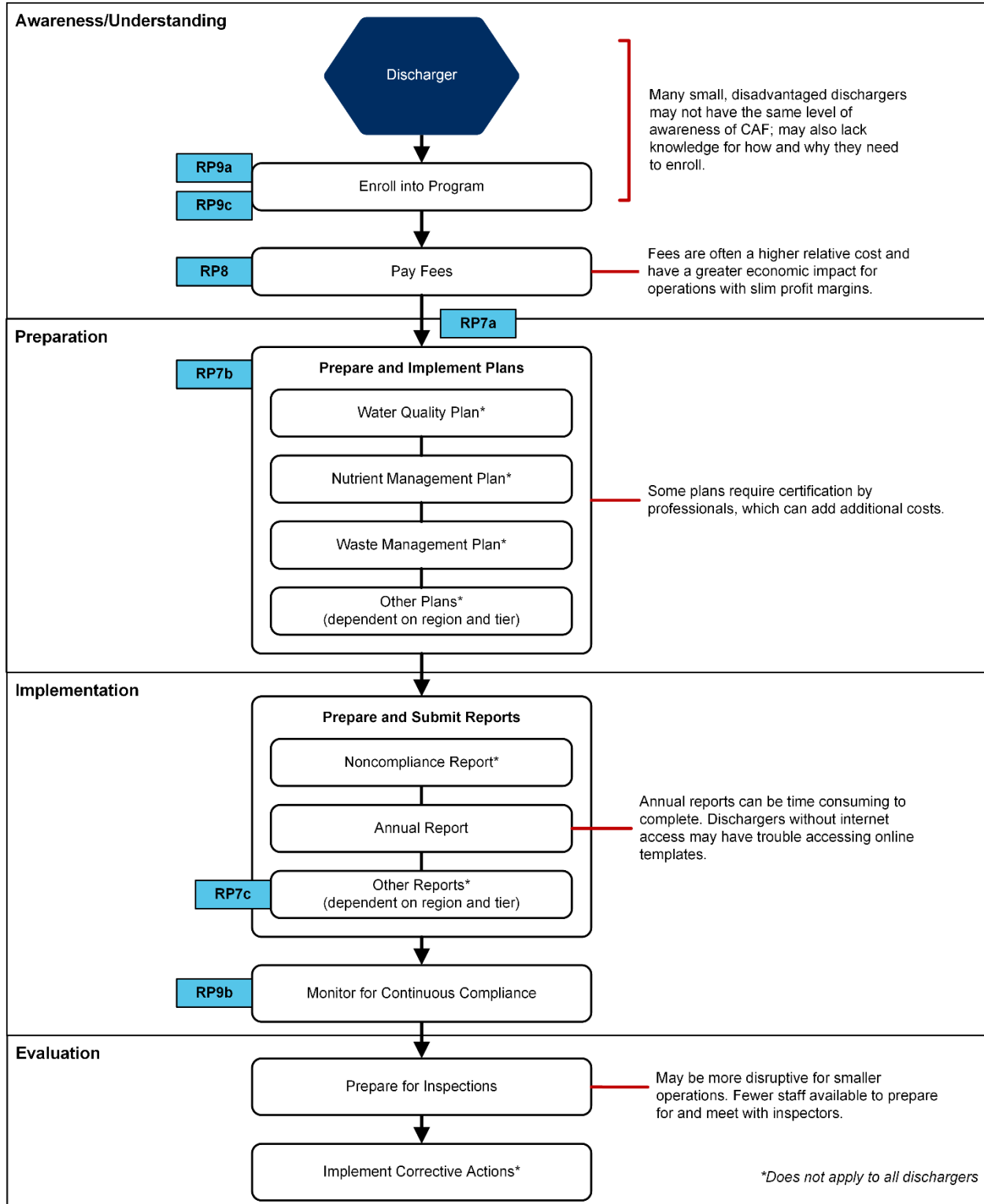
Confined Animal Facilities Program Equity Map

Exhibit 15 describes examples of small-scale, socially disadvantaged dischargers’ experiences with the CAF Program. **Exhibit 16** maps the three of the four proposed RPs to ensure the inclusion of small-scale, socially disadvantaged dischargers in the development, implementation, and enforcement of CAF Program regulations. In the map, Crowe aims to highlight specific parts of the compliance process that are especially challenging for small-scale, socially disadvantaged dischargers. RP10 is not included on the map.

**Exhibit 15
Confined Animal Facilities Program
Examples of Small-Scale, Disadvantaged Discharger Experiences**

Stage	Experiences
Awareness / Understanding	<ul style="list-style-type: none"> • Many small-scale, socially disadvantaged dischargers originally came from other countries with less of a focus on agricultural oversight and thus have less experience with regulatory requirements. • Small-scale, disadvantaged dischargers are often limited by resources, information, and/or technology, which makes it difficult to keep up with CAF requirements. • Navigating regulatory requirements can be a complex process; the time and labor allotment for a small-scale, socially disadvantaged discharger to navigate and understand these requirements is disproportionate relative to the labor force of a large-scale discharger. • Much of the language in the CAF general orders can be difficult to understand for non-native speakers, which may present another challenge to implementing the order’s requirements.
Preparation	<ul style="list-style-type: none"> • Many small-scale, socially disadvantaged dischargers do not have the language skills required to complete the paperwork needed to fulfill regulatory requirements and instead rely on UCCE, trade groups, or partner agencies for assistance.
Implementation	<ul style="list-style-type: none"> • Technology and computer literacy challenges often hinder many small-scale, socially disadvantaged dischargers, making it difficult for them to comply with online submission of forms and documents required for regulatory compliance. • Access to technology is another factor which affects small-scale, socially disadvantaged dischargers. Smaller operations may choose to utilize their profits to enhance agricultural efficiency instead of technology that would streamline their reporting processes.
Evaluation	<ul style="list-style-type: none"> • Small-scale, socially disadvantaged dischargers encounter difficulties with inspections because their time is dedicated to routine facility activities necessary for ongoing operations. They often do not have the financial or labor capacity to afford timely inspections.

**Exhibit 16
Confined Animal Facilities Program
Equity Map**



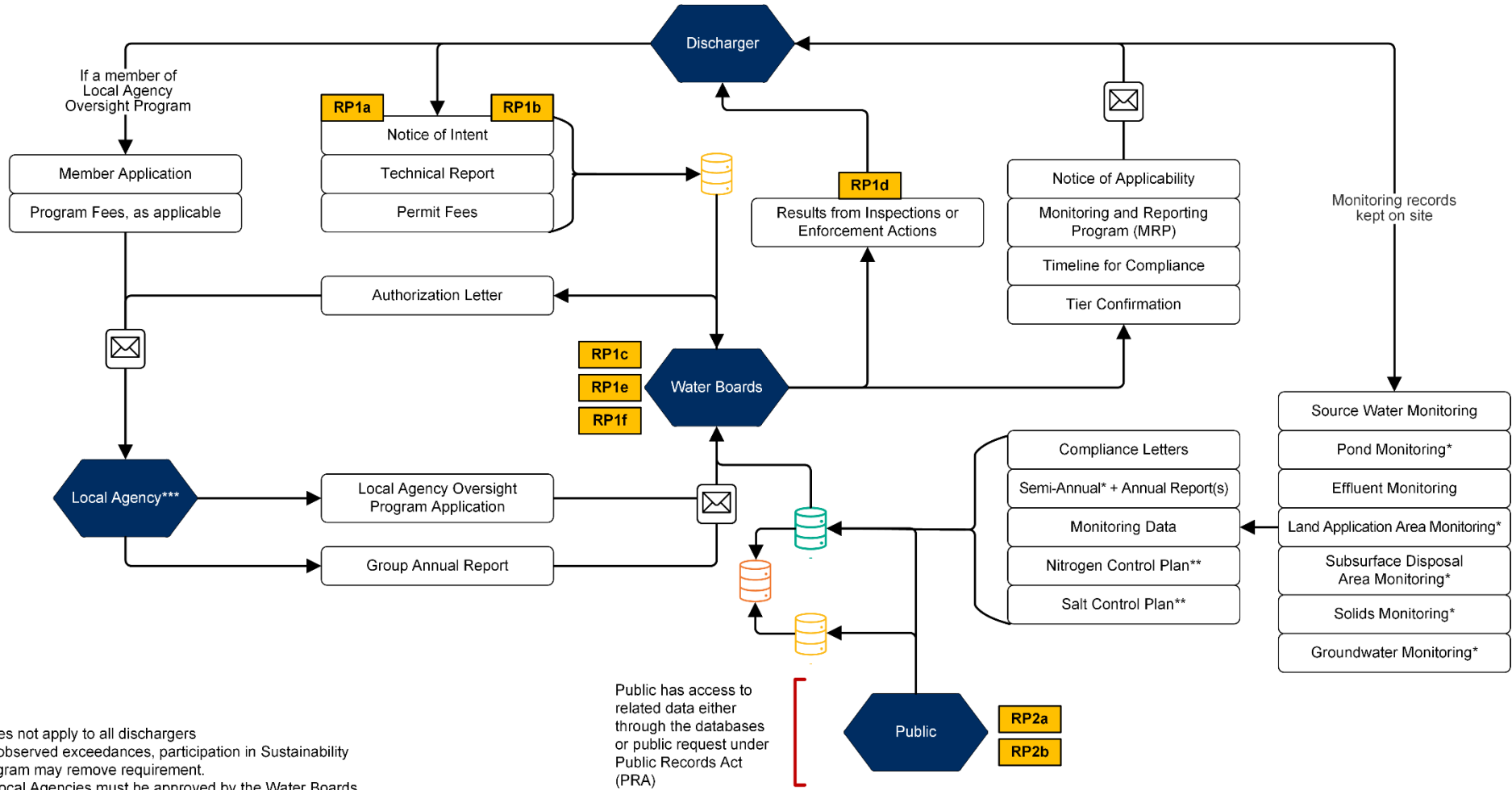
4. Proposed Regulatory Pathways for the State Winery Order

State Winery Order Data and Information Sharing Map

Exhibit 17 maps two proposed RPs aimed at improving the exchange of selected data and information between state regulatory agencies and programs. The map highlights the key data and information shared between the following entities:

- **Discharger:** Winery discharger enrolls through CIWQS and provides their NOI, technical report, and fees to Water Boards. If they wish to participate as a member of a Local Agency Oversight Program, they may be required to submit membership fees and an application to the Local Agency Oversight Entity. As part of the Order, the discharger conducts and collects various monitoring data. A summary of the data, along with an annual report (or semi-annual report), and compliance letter are submitted to the Water Boards. They may also be required to submit salt and nitrate control plans if they do not participate in a sustainability program.
- **Local Agency Oversight Entity:** There are currently no Local Agency Oversight Entities under the Order. Before establishing a Local Agency Oversight Program, the entity must provide an application to the Water Boards and receive approval. If approval is granted, the entity will assist dischargers with monitoring and reporting and provide the Water Boards with a group annual report.
- **Water Boards:** Water Boards collect and manage data from both the Local Agency Oversight Entities and individual dischargers. Under the Order, they are required to provide dischargers with a notice of applicability (NOA), monitoring and reporting program (MRP), timeline for compliance, and tier confirmation. They also receive and review annual reports, compliance letters, and monitoring data.
- **Public:** The public can access publicly available data through CIWQS and GeoTracker. They can also request data from Water Boards through the Public Records Act (PRA) via email or secure file transfer.

**Exhibit 17
State Winery Order
Data and Information Sharing Map**



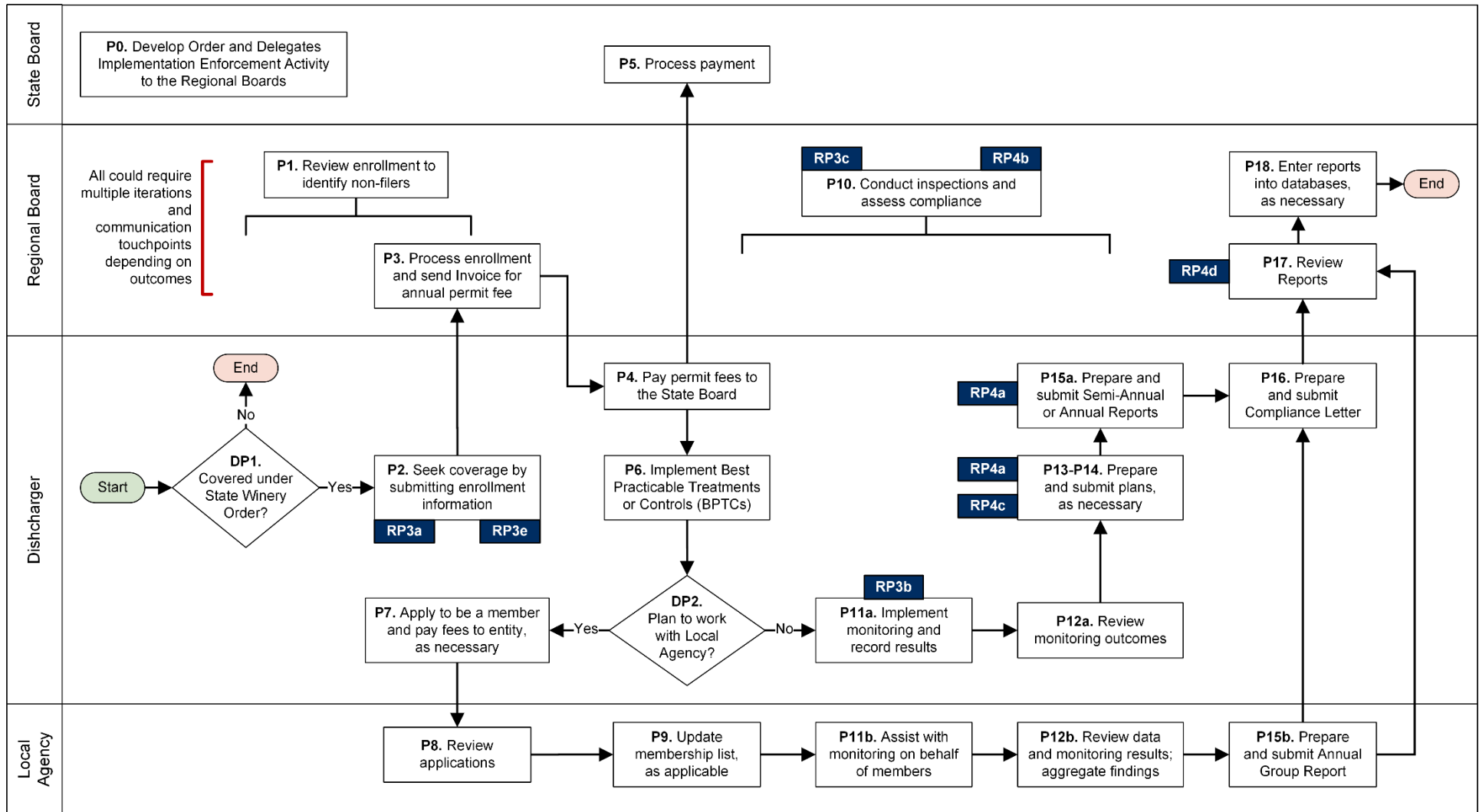
*Does not apply to all dischargers
 **If observed exceedances, participation in Sustainability Program may remove requirement.
 ***Local Agencies must be approved by the Water Boards.

Diagram Key: Entity (Blue hexagon), Data Item (White rounded rectangle), Geotracker (Green cylinder with horizontal lines), CIWQS (Yellow cylinder with horizontal lines), ECM (Red cylinder with horizontal lines), Mail/Email/Fax/Hand-Delivery (White envelope icon), RP# (Yellow box with black text) Regulatory Pathway Reference

State Winery Order Efficiencies Map

Exhibit 18 maps the two proposed RPs to simplify and expedite the State Winery Order related regulatory administrative, reporting, and compliance processes. The map includes information on key processes carried out by State Water Board, Regional Water Board, dischargers, and local agencies. Process paths for dischargers may vary depending on region, facility characteristics, or whether participating as a member of a local agency oversight program. Though, it is important to note that there currently are no approved local agencies. The process map does not highlight related data and information sharing or database utilization across entities, but rather focuses on the flow of administrative and reporting processes. For simplicity, it does not include laboratory activities, which may add additional touchpoints for analysis of water and well samples. It does not include the permit termination process and, therefore depiction of RP3d.

**Exhibit 18
State Winery Order
Efficiencies Map**



State Winery Order Effectiveness Map

Exhibit 19 maps the two proposed RPs to measure SWO performance objectives and goals. The map provides a high-level overview of the connection between state and federal regulations, policies, and guidance to SWO objectives, practices, and measures. The components of this diagram collectively signal the program's effectiveness and support regulatory alignment by creating a structured framework that integrates legal and policy guidance, strategic objectives, actionable practices, measurable outcomes, and performance indicators. Below, Crowe describes how each component contributes to demonstrating the program's effectiveness and regulatory alignment:

- **Guidance**

- **Alignment with State and Federal Regulations:** Guidance from state and federal regulations are essential for developing the basis of an effective order. These state and federal regulations include but are not limited to: State Porter-Cologne Water Quality Control Act (Porter-Cologne, CWC §13000 et seq), California Environmental Quality Act (CEQA, PRC § 21000-21178), California Safe Drinking Water Act (CWC §106.3), and Federal Clean Water Act (33 USC §1251 et seq).
- **Alignment with State Policies and Plans:** In addition to state and federal regulations, the state policies and plans provide additional guidance to the development, implementation, and enforcement of the SWO. Key policies and plans that inform SWO include but are not limited to: Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), Water Quality Enforcement Policy, Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy, Resolution 68-16), California Ocean Plan, and others.
- **Alignment with Regional Plans:** An effective SWO should align with regional plans, such as the Water Quality Control Plans (Regional Basin Plans) which provide numeric and narrative water quality objectives and beneficial uses, the Bay-Delta Plan, and others.
- **Aligning with US EPA Guiding Questions:** The US EPA provides guidance to all state monitoring programs through its paper titled, "Elements of a State Water Monitoring and Assessment Program." In the paper, the US EPA provides five guiding questions that all state monitoring programs should be able to answer to be in alignment with expectations and objectives of the Clean Water Act.
- **Objectives:** For discussion purposes, Crowe gathered SWO objectives from the [State Winery Order, WQ 2021-0002-DWQ](#). These objectives should be in alignment with the federal, state, and regional guidance and should provide goals for tracking program progress.

- **Practices**

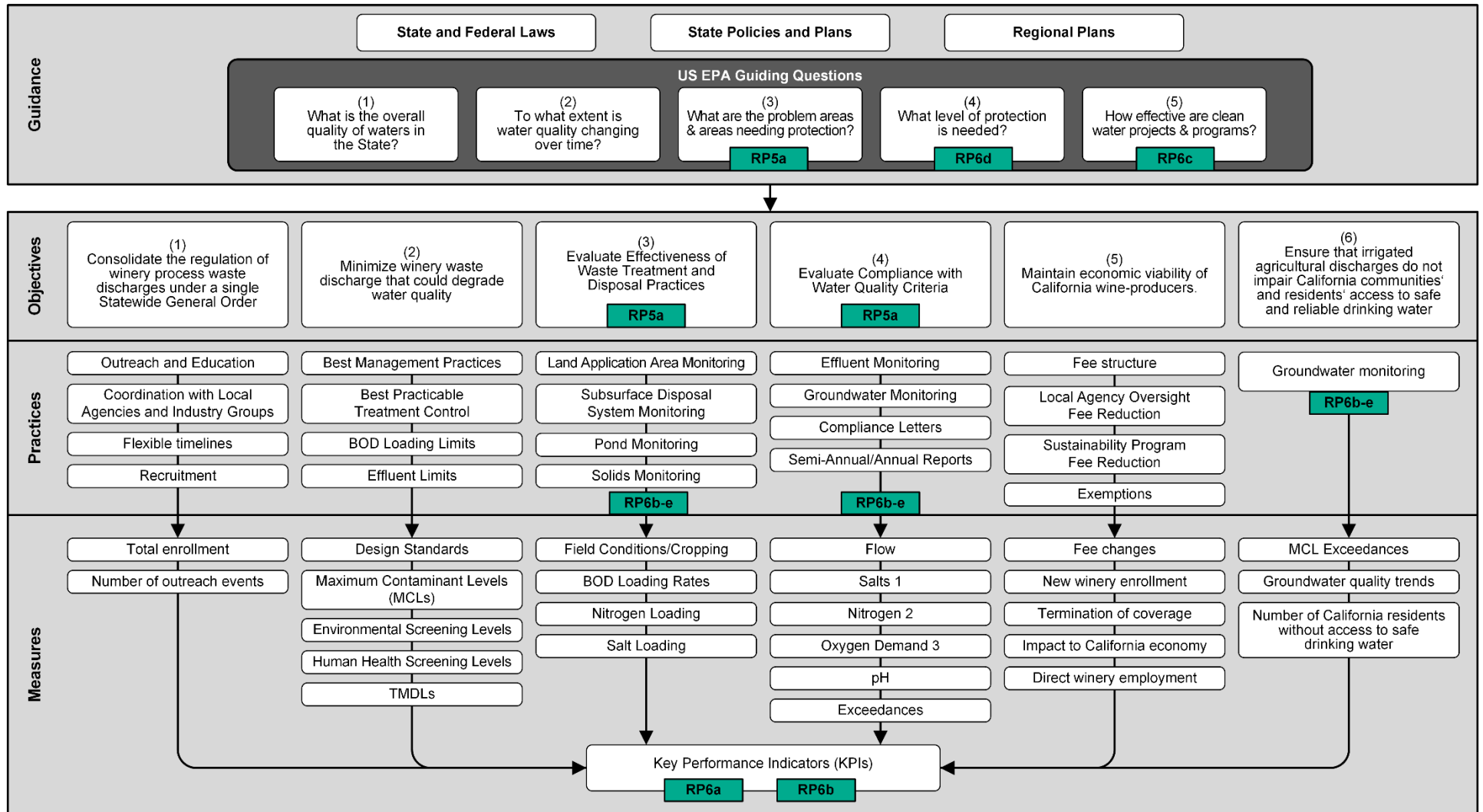
- **BMPs and Best Practice Treatable Control (BPTCs):** BMPs and BPTCs provide tangible actions dischargers should take to achieve SWO objectives. BMPs and BPTCs should be constantly evaluated and updated to improve program effectiveness and meet current regulatory objectives.
- **Monitoring and Reporting:** Monitoring and reporting practices describe the key monitoring and reporting activities dischargers and/or coalitions may be completing in support of SWO objectives.
- **Program Design:** Program design components such as fee reductions for participating in a sustainability program or local agency oversight program describe key attributes of the order in support of the fifth SWO objective.

- **Measures**

- The measures provide specific examples of key data points that can be used to assess compliance with regulations and the effectiveness of the BMPs.

- **Key Performance Indicators (KPIs):** KPIs provide quantifiable benchmarks for the program's performance, allowing for evaluation against regulatory standards and objectives. Currently, there are no identified KPIs for the SWO.

**Exhibit 19
State Winery Order
Effectiveness Map**



State Winery Order Equity Map

Exhibit 20 describes examples of Tier 1 wineries experiences with the State Winery Order, including those that may be socially or economically disadvantaged.⁷ The information that Crowe gathered was limited as many of the dischargers that would be covered under the State Winery Order are still transitioning.

Exhibit 21 maps the two proposed RPs to ensure the inclusion of Tier 1 wineries in the development, implementation, and enforcement of State Winery Order regulations. The map aims to highlight specific parts of the compliance process that are especially challenging for Tier 1 wineries that may be socially or economically disadvantaged.

Exhibit 20 State Winery Order Examples of Small-Scale, Socially Disadvantaged Winery Discharger Experiences

Stage	Experiences
Awareness / Understanding	<ul style="list-style-type: none"> • Generally, wineries with existing waste discharge coverage through regional programs, waivers, or individual WDRs are aware of the timelines and conditions of the new Winery Order. Tier 1 wineries, especially those that were previously unpermitted, have less awareness and understanding. • Tier 1 wineries typically lack dedicated environmental compliance staff. Compliance responsibility is overseen by facility or operations managers who are unfamiliar with enrollment, monitoring, and reporting processes and lack technical expertise. • Tier 1 wineries may not understand why they might be regulated under multiple water quality permits (e.g., SWO and IGP). • Tier 1 wineries suggest that the 10,000 gallon per year process water flow threshold for coverage applicability is too low.
Preparation	<ul style="list-style-type: none"> • Tier 1 wineries may require need time to “get up to speed” on new Order requirements, especially those who are not familiar with Best Practical Control Treatments (BPCTs). • Tier 1 wineries worry about the costs to implement BPCTs.
Implementation	<ul style="list-style-type: none"> • Tier 1 wineries, especially socially or economically disadvantaged wineries were concerned about aspects of the SWO that required expensive changes to their existing waste-management systems. For example, the separation of commingled systems. • Tier 1 wineries may seek alternative waste-management solutions (e.g., Tank and Haul), instead of seeking coverage for their waste discharges. • Monthly reporting accounts for a significant amount of time for wineries with limited staff resources.
Evaluation	<ul style="list-style-type: none"> • Based on the results of their first year(s) of monitoring, some wineries may need to develop additional plans (i.e., Nutrient Plans and Salt Plans). The development of these plans is a greater challenge for wineries with limited staff who lack technical expertise. The costs to hire consultants to assist with the development of these plans likely impacts Tier 1 wineries more than larger wineries. • Without feedback from SWO staff, Tier 1 wineries, like all other wineries, are unsure of whether they are adequately complying with SWO requirements.

⁷ 13 CFR § 124.103 and 124.104 describe the definitions of socially disadvantaged and economically disadvantaged individuals

**Exhibit 21
State Winery Order
Equity Map**

