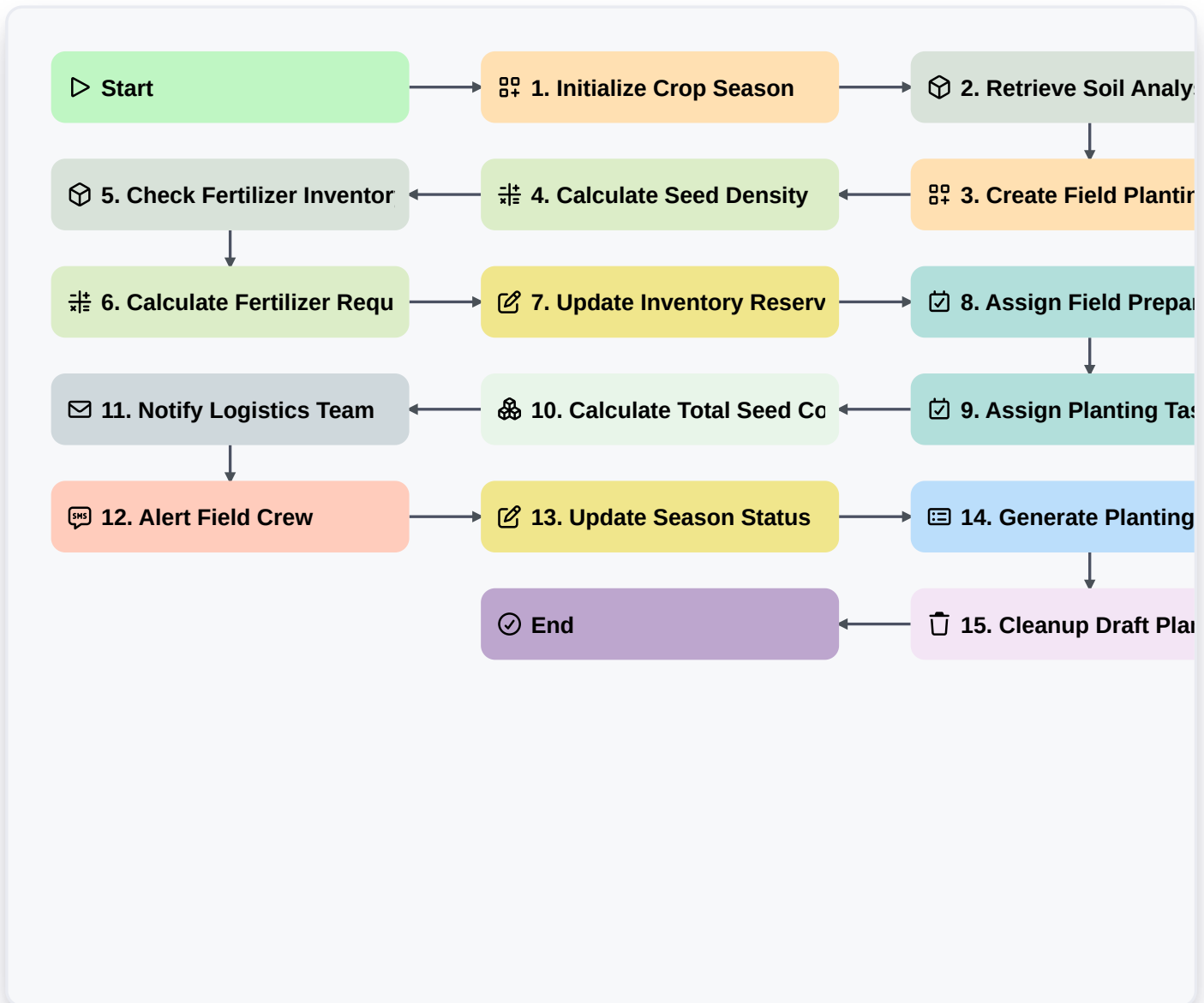


Crop Planning And Planting Workflow



▷ Start

Start of the Workflow/Process.

🗄️ 1. Initialize Crop Season

Create a new entry in the 'Crop Season' data model to define the start date and primary crop focus.

📦 2. Retrieve Soil Analysis Data

Fetch the most recent soil nutrient and pH levels from the 'Soil Health' data model.

🗄️ 3. Create Field Planting Plan

Create a new entry in the 'Planting Plan' data model for specific field plots.

🔢 4. Calculate Seed Density

Calculate the required amount of seeds based on field area and target plant spacing.

📦 5. Check Fertilizer Inventory

Retrieve current stock levels of required fertilizers from the 'Inventory' data model.

🔢 6. Calculate Fertilizer Requirement

Calculate the total mass of fertilizer needed based on field size and nutrient deficiency.



7. Update Inventory Reservation

Update the 'Inventory' entry to deduct/reserve the calculated amount of fertilizer for the upcoming planting.

8. Assign Field Preparation Task

Create a task for the Farm Manager to oversee plowing and soil amendment.

9. Assign Planting Task

Create a task for the Field Crew to execute the actual planting based on the plan.

10. Calculate Total Seed Cost

Aggregate the costs of all seed varieties selected in the 'Planting Plan' to determine total budget impact.

11. Notify Logistics Team

Send an email to the logistics department regarding the scheduled delivery of seeds and equipment.

12. Alert Field Crew

Send an SMS to the field crew leader regarding the start date and weather window.

13. Update Season Status

Update the 'Crop Season' entry status to 'In Progress' once planting tasks are initiated.

14. Generate Planting Readiness Report

Generate a summary report comparing planned planting dates against current soil and inventory readiness.

15. Cleanup Draft Plans

Delete any superseded or cancelled planting plan drafts to maintain data cleanliness.

End

End of the Workflow/Process.