Partner Database User Instructions

Summary

1. **Login**
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3. **Map Controls** (change basemap, view reference layers)
4. **Add Field** (if does not already exist, fields must be associated with a farm)
5. **Add Grant** (practices and visits must be associated with a grant)
6. **Add Practice** (practices must be associated with a field and a grant)
7. **Add Visits**
8. **Add People Involved** (farmer and "partners" e.g. service providers)
9. **Create Map**
10. **Create Report**

NOTE: All eligible partners must first complete the following before accessing the Partner Database:

a. Training by VAAFM (contact Judson Peck)
b. Read the Quality Assurance Project Plan
c. Sign and submit the User Agreement

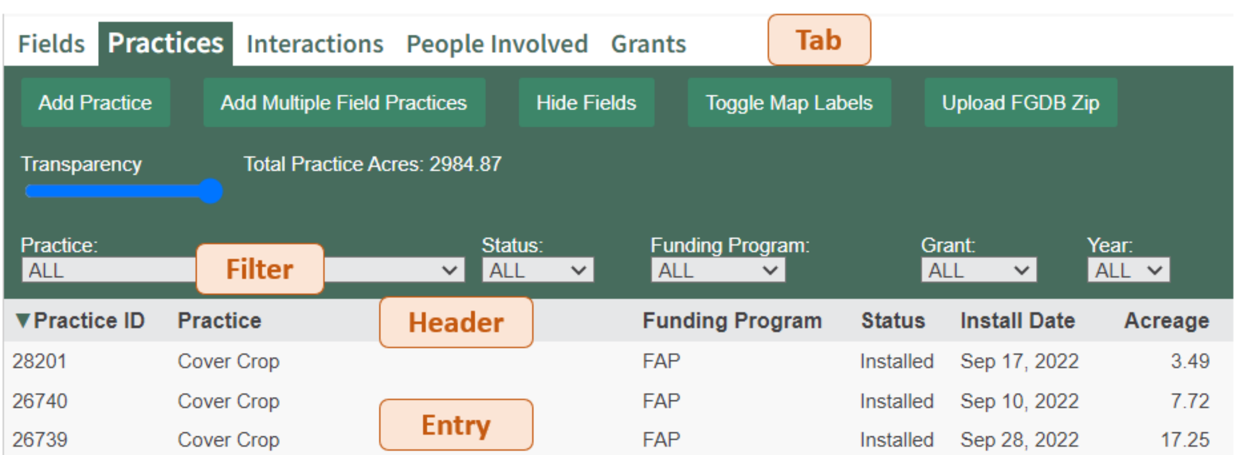
***** This guidance document provides instructions on how to use the Partner Database. Please review the Quality Assurance Project Plan (QAPP) on what to report in the Partner Database. *****

Login

1. Login to the Partner Database (PDB) using your username and password: https://vtpartners.stone-env.net/#!/login
2. Contact **Judson Peck** for any login issues or to request access: judson.peck@vermont.gov
3. NOTE: As updates occur you may need to occasionally do a "hard reload" by following these instructions:
   a. Once logged in to the PDB, right click anywhere on the webpage and click "Inspect"
   b. Ignore the new panel that appears and click and hold on your browser's "refresh" button
   c. Unclick while hovering over "Empty Cache and Hard Reload"
   d. Close browser and login again
   e. **If you encounter performance issues with the PDB, do a "hard reload" before requesting assistance**

Search for Farm

1. **NOTE: The database is farm-centric, i.e. all information is associated with a farm – a farm must be selected before adding fields, practices, visits, etc.**
2. Click **Search & Add Data** from the main menu
3. In the search bar at the top of the page, type in the name of the farm, operator or town
    a. Search is sensitive – name must match *exactly* including special characters – typing fewer characters is often more successful
    b. Can also search by town and choose from the list of farms
    c. Can also leave search box empty and click "Search" to see all farms and then zoom around on map to find a farm
    d. Search results will only return for Counties that the User has access to based on area of work
    e. If the farm does not exist in the system, submit a **New Farm Request Form**: https://forms.office.com/pages/responsepage.aspx?id=O5O0IK26PEOcAnDtzHVZxrnjII9WkZVPuG4VWE_DDJ9UOTBLRFZWOE9ZTEJGMzRSQUtVQUpFRVM0Vy4u
4. Click on the farm **Operation** and then **Facility** from the search list – automatically zooms to the selected farm (facility) point and displays fields associated with that facility in green
5. View farm information for both the facility and the operation by clicking on the **Details** button under the "Operation/Facility Information" header
    d. *Facility* is the farmstead, one or more facilities may exist for a farm *operation* (business)
        i. Operation details contain contact information for the farmer (operator)
        ii. Facility details contain location details (physical address)
    e. Farm Details are locked – contact Judson Peck to update or add farm information
6. Click on **Pre-Visit Data Check** to create a PDF of a farm's Operation and Facility information, which includes contact info, addresses, facility type, notes, county and basin
7. Once a **Facility** is selected **5 tabs** appear with information associated with each:
    a. Fields
    b. Practices
    c. Interactions (visits)
    d. People Involved (farmer and service providers)
    e. Grants (state only)
8. Each tab contains "lists" of individual "entries":



9. Within each of these tabs, the column **headers** of the list can be **sorted** by clicking on them; click again to sort the other way; and click again to clear sorting (green arrow indicates direction of sorting)
10. Additional dropdown **filters** exist above the headers to select specific attributes, e.g. practice type, funding program, etc. – both the column list and the map adjust accordingly
11. Clicking on an existing **entry** within any of the tabs:
    a. Highlights the entry in the list and on the map
    b. Expands further details of entry and option to edit or delete the entry
    c. Click again to close, or click on another entry
    d. Additionally, clicking directly on the map highlights entry on the list

Map Controls

1. Click on the three white arrows along the center left of the screen to open the **Map Controls**
2. Change **Basemap** from the default as desired
3. Check the boxes next to **Optional Layers** to add to the map; multiple optional layers can be displayed; click on the green arrow next to the optional layer to view the legend and adjust the transparency
4. NOTE: Layers have "zoom extents" which means can only view at certain zoom, may need to zoom in or out if layer is checked but not readily viewable
5. NOTE: Many of the layers, with "ANR", are the same as those on ANR Atlas
6. Additional Partner Database specific layers include:
    a. **WQ Fields** – statewide field boundary layer based on NMP submissions to VAAFM (only available for larger farms and updated based on submission cycle); labels include field and farm name
    b. **CLU Boundaries** – Common Land Unit (field) boundaries originating from USDA Farm Service Agency from 2008 (not updated since); labels include farm, tract and field numbers
    c. **Critical Source Areas** – critical source areas are an indexed field rating of risk of soil erosion and runoff to surface water; index score based on soil slope, hydrologic group (infiltration), Kw factor (erosion), flooding frequency, and proximity to surface water; higher score indicates higher risk of soil erosion *and* loss to surface water; created by VAAFM, contact Judson Peck for more information; layer currently only exists for Lake Champlain Basin
    d. **Soil Erosion Risk** – same soil erosion risk factors included in critical source area layer, but does not include proximity to surface water and not area-weighted to field boundary; created by VAAFM, contact Judson Peck for more information; statewide layer
    e. **Concentrated Flow** – more detailed surface water layer based on digital elevation models from LiDar; able to view more ephemeral concentrated flow areas; pair with **Hillshade** layer for best viewing

***** Fields, Practices and Grants should only be added to the Primary Facility *****
(listed under Facility details, Primary Facility = Yes)

Add Fields

1. Click on the **Fields** tab to view fields associated with the selected farm (facility) – displayed on the map as green polygons
2. **NOTE: All practices must be associated with a field – may need to draw/edit fields first**
3. NOTE: Can draw fields with non-cropland landuses, including Farmstead, Associated Ag Land, Other Rural Land, etc. for non-cropland practices
4. Click **Add Field** and complete the following information:
    a. **Field Name** – enter what the farm uses; please enter if known
    b. **Landuse** – required (should be appropriate for intended practices, e.g. crop or pasture); see Practice-Landuse table below
    c. **Crop** – optional
    d. **Management** – optional
    e. **Leased** – optional
5. There are **THREE** ways to add a field to a farm – Draw Shape, Select CLU Boundaries, or Select WQ Fields. Copying field boundary shapes from either of the reference layers (CLU Boundaries or WQ Fields) may save time if it already exists. However, if it does not exist or is not correct and requires many edits, it may be quicker to draw the field boundary:
    a. Click **Draw Shape**
        i. Use to draw a new field shape from scratch
        ii. Use the pointer to click and draw a new field boundary, hold control key while clicking to snap to existing fields; double click to finish drawing
        iii. Can edit the shape by clicking and dragging the nodes, right click to delete nodes
        iv. Click “Finish Shape” and then “Save”
    b. Click **Select CLU**
        i. Common Land Unit (CLU) layer originates from USDA Farm Service Agency from 2008; contains farm, tract and field numbers; not up to date
        ii. First turn on “CLU Boundaries” layer under map controls
        iii. Use the pointer to select an orange CLU polygon, which will turn yellow when selected
        iv. Click “Stop Editing Shape” and then “Save”
        v. Can also “Edit the Shape” by clicking and dragging the nodes, right click to delete nodes (will not change the original reference layer)
    c. Click **Select WQ Fields**
        i. Water Quality (WQ) Fields layer originates from NMPs submitted to VAAFM; only exists for larger farms
        ii. First turn on “WQ Fields” layer under map controls
        iii. Use the pointer to select a WQ Field (colored per farm operation), which will turn yellow when selected
        iv. Click “Stop Editing Shape” and then “Save”

   v. Can also "Edit the Shape" by clicking and dragging the nodes, right click to delete nodes (will not change the original reference layer)

6. NOTE: Database automatically creates a unique **Field ID** and calculates **Acres**
7. Once the field has been added to the farm (green), either by drawing a new shape or selecting from the CLU or WQ Field layers, it appears in the field list and can be edited at any time if needed
8. **NOTE: Editing field shapes to correctly reflect practice implementation will save time when creating practices, especially if reoccurring practices in future**
9. NOTE: Click on "Home" menu in the top left corner and navigate back to the farm in order to '**refresh'** the page if there is a delay/glitch in creating the field (background geospatial processing occurs)

	Landuse			Crop Rotation		
Field Practice	**Crop**	**Pasture/Hay**	**Pasture**	**Annual**	**Rotated** (annual & permanent)	**Permanent** (hay or pasture)
Cover Crop	X			X	X	
Nurse Crop	X	X	X	X	X	
Conservation Crop Rotation	X				X	
Crop to Hay	X			X	X	
Reduced Tillage	X			X	X	
No-Till	X			X	X	
No Till Pasture and Hayland Renovation		X	X		X	X
Forage and Biomass Planting	X	X	X	X	X	
Manure Injection	X	X	X	X	X	X
Precision Agriculture	X	X	X	X	X	X
Rotational Grazing		X	X			X
Livestock Exclusion		X	X			X
Riparian Forest Buffer	X	X	X	X	X	X
Filter Strip	X	X	X	X	X	X
Grassed Waterway	X			X	X	
Contour Buffer Strips	X			X	X	

Add Grant

1. **NOTE: All practices must be associated with a Grant – create grant *first* so available for association when creating practices – only Administrators can create and edit grants**
2. Click the **Grants** tab to view grants associated with the farm
3. Click on a grant to see more details, or edit or delete the grant (if applicable)
4. Click **Add Grant** and complete the following information (* = required):

   a. **Grant ID** should be in the format **Year***GrantID*, e.g. **2023***014* (4-digit year + 3-digit grant)
   b. Select **Status** from dropdown
   c. Select **Funding Program** from dropdown
   d. Enter in **Grant Total** (amount awarded) and select the funding source
   e. Repeat if second funding source exists
   f. Enter in **State Payment Total** (amount paid by state) and select the funding source
   g. Repeat if second funding source exists
   h. Select the **CEAP Equipment Type** if CEAP grant
   i. Enter in the **Federal Match, Landowner Match and VHCB Match** if applicable
   j. **Application Date** is required
   k. **Start Date** and **End Date** is required when the grant status is Active or Complete
   l. Add any relevant **Notes**
5. Click **Add** (save) when complete
6. Once saved, grants will be available for practice association in the Practice tab

Add Practices

1. Click the **Practices** tab to view practices associated with the farm (facility), displayed on the map as polygon, line or point features with various symbology
2. **NOTE: Practices can be added ONE at a time or MULTIPLE at a time:**
   a. **Add Practice** (one at a time) – best for adding a single practice and non-"field" (entire field area) practices, e.g. buffer, fence, laneway or pipe
   b. **Add Multiple Field Practices** (multiple at a time) – best for adding multiple practices of the same type, i.e. cover crop to 10 fields, and that are "field" practices, i.e. cover crop entire field area (practice area = field area); all practices can be edited *after* creation, but this approach will first use the field area
   c. Each approach requires the same information
3. Click **Add Practice** button and complete the following information accordingly:
   a. Select **Practice** type from the dropdown list
   b. Select **Status** – practices may be drawn as ***Planned*** status – only change to ***Installed*** status once the practice has been implemented
   c. Check **Field Verified** if you visually saw the practice implemented in the field to the practice standards or qualifying conditions outlined in the QAPP
   d. Check **Meets NRCS Standards** if the practice was implemented according to NRCS Practice Standards; see QAPP to see if NRCS standards are required for the practice
   e. Check **Required Ag Practice** if the practice was implemented to meet compliance with the RAPs (i.e., buffers, tolerable soil loss, livestock exclusion, etc.)
   f. Add **Notes** (optional)
   g. Select **Funding Program** from the dropdown list – *required* for all practices, but can be funded by the "Farmer" (no cost-share)
   h. Enter **Install Date** of when the practice was implemented in the field – *required* for installed status practices

i. **Lifespan End Date** is automatically calculated based on NRCS practice lifespans (displayed on the right); End Date calculated from the Install Date; purpose is for TMDL accounting; **DO NOT edit lifespan end date unless specified in the QAPP**
j. **NOTE: reoccurring practices (e.g. occur following year) must be added separately – cannot simply edit the end date of an existing practice**
k. All practices must be associated with a Grant:
    i. Select the appropriate **Associated Grant ID** from the dropdown list (populated from the Grants tab)
    ii. If the associated grant ID does not exist in the dropdown list, manually add an **Associated External Grant ID** in the format **Year***GrantID*; e.g. **2023***014* (4-digit year + 3-digit grant number)
l. All practices must be **associated with a Field**:
    i. Click "Select Field" and then use cursor to single click on field; once selected the field id will appear next to Associated Field (click on another field to change); click "Save"; (note this step only associates the field *id*)
    ii. **NOTE: Associating practices to a field applies to ALL practices**, including non-field practices such as, farmstead practices, buffers, laneways, wells, etc.
        1. For farmstead practices draw a field with "Farmstead" landuse
        2. If practice exists outside of the field boundary (e.g. buffer) choose the closest adjacent field to associate
        3. If practice spans more than one field (e.g. buffer, laneway, pipeline) choose the dominant field to associate
m. Create **practice shape**:
    i. If the practice area matches the associated field area from the previous step, simply check "**Use associated field shape**" (minor shape edits can be made after first saving the practice)
    ii. If the practice area is substantially different click "**Draw Shape**" and use cursor to draw shape on the map:
        1. Click once to start drawing
        2. Continue clicking to map shape
        3. Hold "control" key and click to snap to another field or practice shape
        4. Double click to finish drawing shape (turns yellow)
        5. The "nodes" (grey and white dots) can be moved by clicking and dragging, or deleted by right clicking on node
        6. Click "Finish shape" when done drawing/editing shape
        7. Click "Save" to save the practice

4. Click **Add Multiple Field Practices** button and complete the necessary information same as above (steps 3a-k). The only step that is different is associating fields and mapping practices – which occurs as a combined single step:
    a. **Selected Fields** is initially "Empty" – click on fields on the map to add the practice to fields (turns green and field id is listed in Selected Fields); click again on same field to unselect if necessary
    b. Click "Save" when all fields have been added (remember practice shape = field shape)
    c. Practice attributes or boundaries can be edited individually after saving if needed

5. Individual practices can be **edited** or **deleted** (regardless of how created) by selecting practice from the list and then clicking on respective buttons
6. Individual practices can also be **duplicated**, i.e. same practice occurring the following year:
    a. Rather than redrawing, select the existing practice and click **Duplicate & Edit** which opens a *copy* of the existing practice with practice attributes already completed
    b. Edit as needed – some change is required (e.g. Install Date) otherwise you are creating an exact duplicate which is an error
    c. Click "Save" when complete
    d. NOTE: If duplicating *multiple* practices, **Add Multiple Field Practices** is probably faster
7. NOTE: Click on "Home" menu in the top left corner and navigate back to the farm in order to '**refresh'** the page if there is a delay/glitch in creating the practice(s)
8. Practices can also be added by **uploading GIS shapefiles** using the "Upload FGDB Zip" – however, shapefiles must be in a specific ArcGIS geodatabase format – contact Judson Peck for the GIS template and detailed instructions (*ArcMap required*)

Interactions (Visits)

1. Click on the **Interactions** tab to view visits and interactions with the farm from people across multiple organizations
2. Click **New Visit** to add your visit or interaction with the farm
3. Complete the following information required:
    a. **Interaction Type**
        i. *On-Site Visit* – boots on the ground at the farm or farm fields
        ii. *In-Office Visit* – visit with famer in your office
        iii. *Communication* – email or phone communication with farm (optional)
    b. **Funding Program** – enter program funding your visit/interaction
    c. **Duration** – enter hours of interaction, include drive time to farm as specified in QAPP
    d. **Date** – enter date of interaction
    e. **Status** – enter status of interaction (must match date, i.e. date is current or past if status is complete); delete visits that do not occur (cancelled)
    f. **Notes** – simple explanation of interaction required, e.g. FAP field check, CEAP equipment assistance, etc.
    g. (optional) Click the "Change" button to set the **Person Contacted** from the list or click the **Create a New Person**
4. NOTE: Documenting visit information is helpful for yourself and other partners working with the farm – recommend noting all "On-Site Visits" at a minimum – VAAFM or other agency enforcement/inspectors will not be able to view this information, only partners
5. NOTE: VAAFM Water Quality Regulatory Visits are populated for partner viewing – can see type, date and inspector
6. **NOTE: Adding an interaction will automatically populate you as a person in People Involved** – update Role as needed (see below)

People Involved

1. Click on the **People Involved** tab to view the farm operator(s) and other partners working with the farm
2. Add yourself to the farm if you provide technical services by clicking **Add People to Farm**; scroll through the list or type the name into the box to filter; click "**+**" to add the person to the farm
3. If the person does not exist in the system, click **Create New Person** at the bottom
4. Once added to the farm, add the person's **Role** and update any contact information
5. NOTE: Each person (farmer or partner) should have a *single* contact card in the database, but they may have *multiple* or different roles
6. NOTE: Users cannot edit farm operators – contact Judson Peck to add/edit farm or farmer information
7. NOTE: Deleting a person involved removes the person from the farm, but does <u>not</u> delete the person's contact

Create Map

1. Click on the three arrows along the center left of the screen to view the **Map Controls**
2. Click on green arrow next to **Export Map Tools**
3. Enter **title** of map
4. Choose map **format** from dropdown (PDF, JPG, PNG)
5. Check **Show Field Details** to include field details on the map (Field ID, Name, Acres, etc.)
6. Check **Include in Legend** to include any optional layers selected in the map legend
7. Click **Print Map** – the map will load in a new tab in your internet browser – make sure any pop-up blockers are disabled – may take a few minutes for the map to generate
8. NOTE: Everything displayed on the map screen will be exported onto the map – use practice filters to modify what is displayed on the map; fields can also be exported as a map

Create Report

1. Click **Home** menu button at top left corner of screen
2. Click **Generate Reports**
3. Click on one of three types of reports to generate:
    a. Detailed Practice Report (individual practice list with details)
    b. Summary Practice Report (summary stats based on filters selected)
    c. Interactions Report
    d. NOTE: Not all report types may be displayed depending on your user access role
4. For all report types, expand the green headers and check any or all of the options of the data to include and the filtering options
5. Click **Get CSV** to export the selected information as a CSV file, which will download to your computer
6. Detailed Practice Report also has the option to export shapefiles, which can be loaded into ArcGIS – click **Get Shapefile** to download to your computer
7. **NOTE: Follow guidelines in QAPP and your signed User Agreement with use of downloading and sharing information**