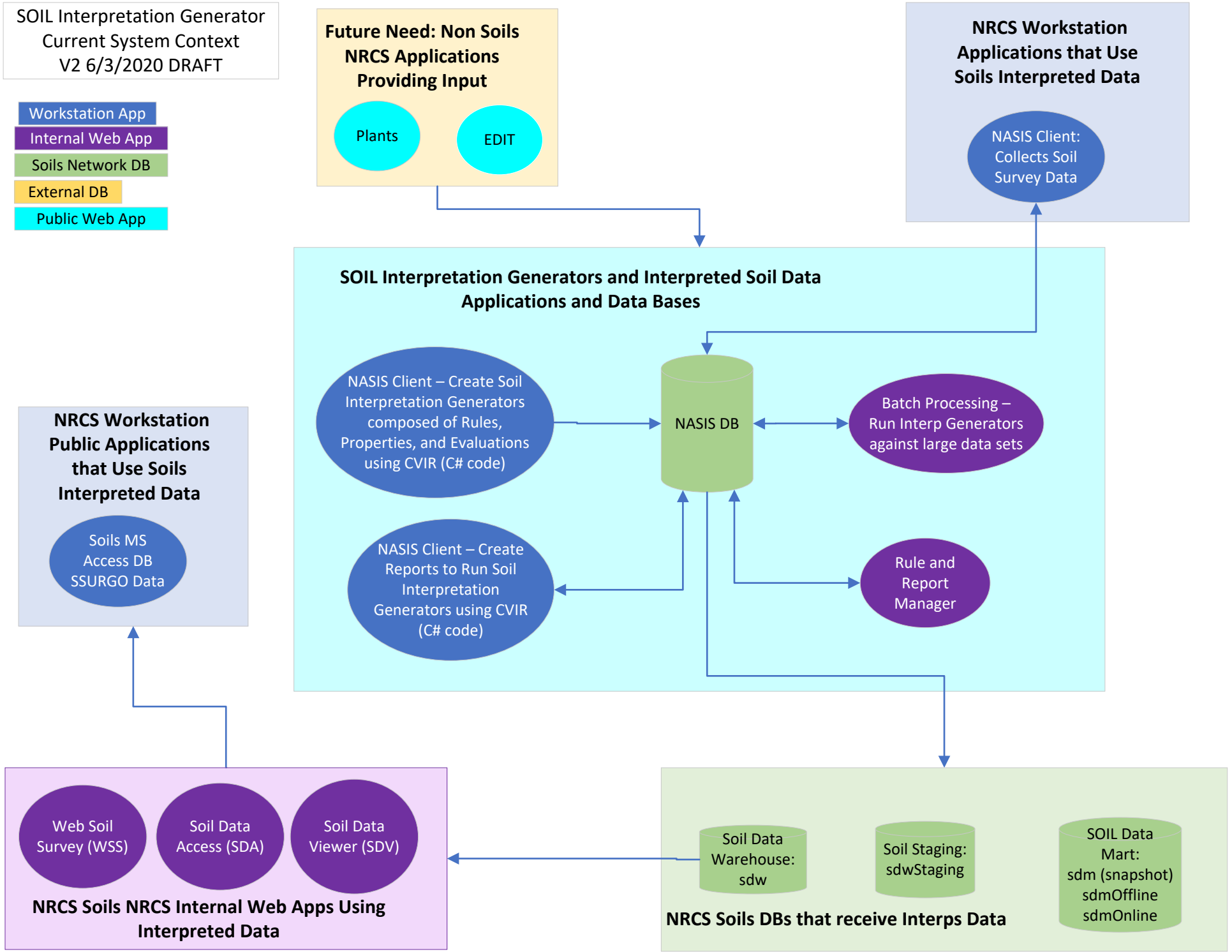

SOIL Interpretation Generator
Current System Context
V2 6/3/2020 DRAFT
Workstation App
Internal Web App
Soils Network DB
External DB
Public Web App
Future Need: Non Soils NRCS Applications Providing Input
Plants
EDIT
NRCS Workstation Applications that Use Soils Interpreted Data
NASIS Client: Collects Soil Survey Data
SOIL Interpretation Generators and Interpreted Soil Data Applications and Data Bases
NASIS Client – Create Soil Interpretation Generators composed of Rules, Properties, and Evaluations using CVIR (C# code)
NASIS DB
Batch Processing – Run Interp Generators against large data sets
NASIS Client – Create Reports to Run Soil Interpretation Generators using CVIR (C# code)
Rule and Report Manager
NRCS Workstation Public Applications that Use Soils Interpreted Data
Soils MS Access DB SSURGO Data
Web Soil Survey (WSS)
Soil Data Access (SDA)
Soil Data Viewer (SDV)
NRCS Soils NRCS Internal Web Apps Using Interpreted Data
Soil Data Warehouse: sdw
Soil Staging: sdwStaging
SOIL Data Mart: sdm (snapshot) sdmOffline sdmOnline
NRCS Soils DBs that receive Interps Data

SIG HL Capability Diagram v4 7/28/2020 DRAFT

Soils Interpretations Generator Creation & Management

Soils Applications

NASIS Client Editor & SQL Express

- Rules, Evaluations and Properties are components of the Soils Interpretation Generator Fuzzy Logic models which are created and managed using the NASIS Client Editor. These components uploaded to NASIS DB as tables. Some stored as C# code.
- Reports are created and managed to enable running the Soils Interpretations Generators. Running the models results in the creation of 'Soil Interpretations. The results are stored in the NASIS DB and available to downstream processes and data delivery apps. Reports requiring larger volume of data are scheduled for batch processing.

Soils DBs

NASIS National DB – stores the components of Soil Interpretation Generator models as records. Request data from National DB using a batch job which downloads to Local DB
NASIS Local SQL Express DB which is integrated with the NASIS Client Editor.

Soil Interpretations Processing

Soils Data Management Apps

- NASIS Editor Client SQL Express – used to develop interpretations. Feature that allows testing of components and whole models using smaller volumes of data. .
- Use Report Editor to either run against Local Data or Create Job on Batch Queue to run on National NASIS DB.
- Web Soil Survey Rule and Report Manager (WSSRRM)
- Web Soil Survey Rule and Report Service (WSSRRS)

Soils Data Management DBs

- NASIS DB – Data and Interpretation Generators (Models) and results of running the generators are stored here.

Soils Interpretation Generators and Interpretation Results are Delivered using Soils Applications

Soils Data Delivery Apps

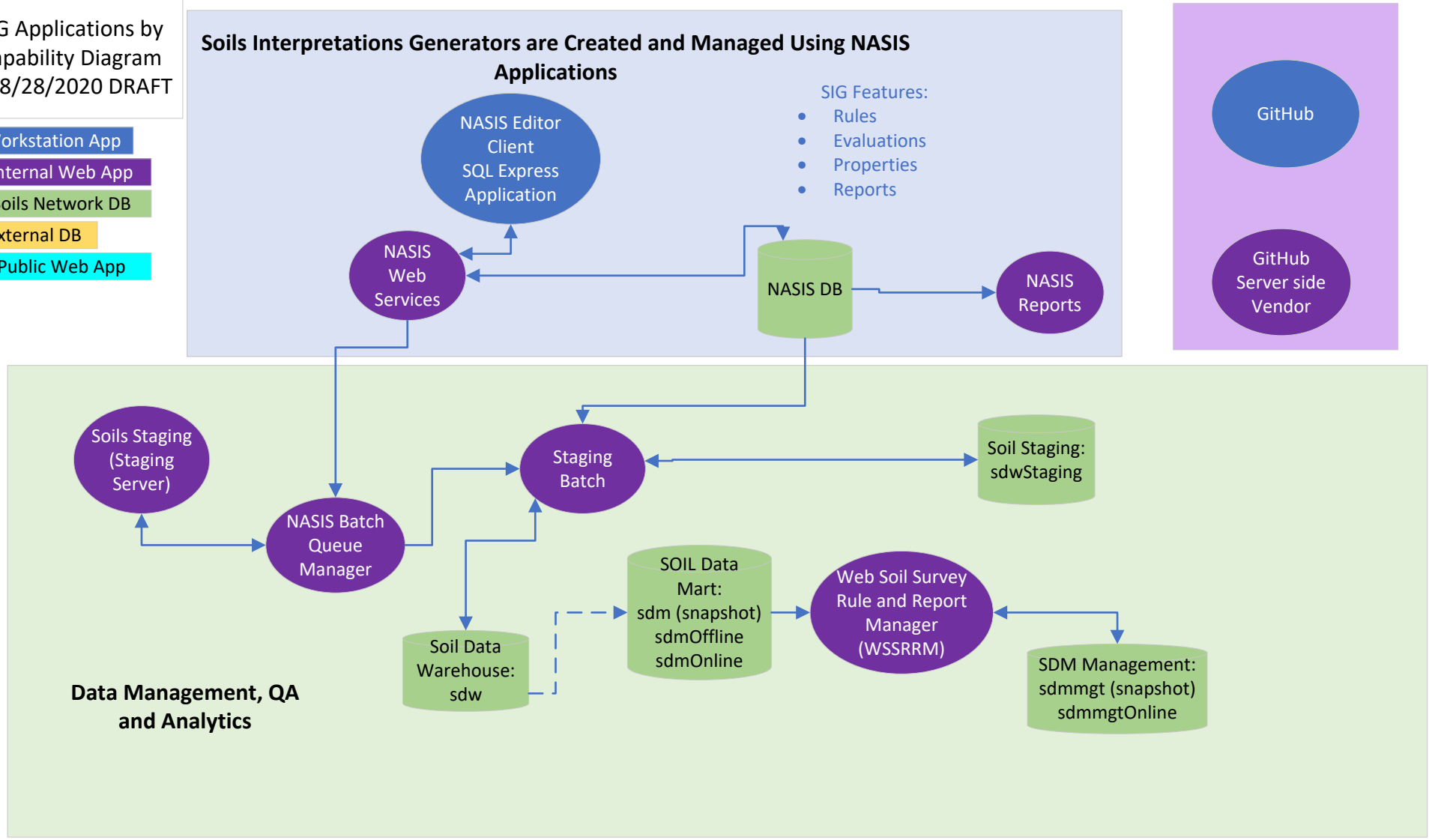
- Web Soil Survey (WSS) – Delivers Interpretation results to users
- Soil Data Access (SDA) – Delivers Interpretation results to users
- Soil Data Viewer (SDV)– Delivers Interpretation results to users
- NASIS Reports – Review, QA/QC, send custom Interpretations to users. Text or HTML outputs

Soils Data Delivery DBs

- Soil Data Mart (SDM) – where interpretations ready for publication are stored. Provides Interpretations to the Data Delivery apps
- Access Template Database + SSURGO data.

SIG Applications by Capability Diagram V7 8/28/2020 DRAFT

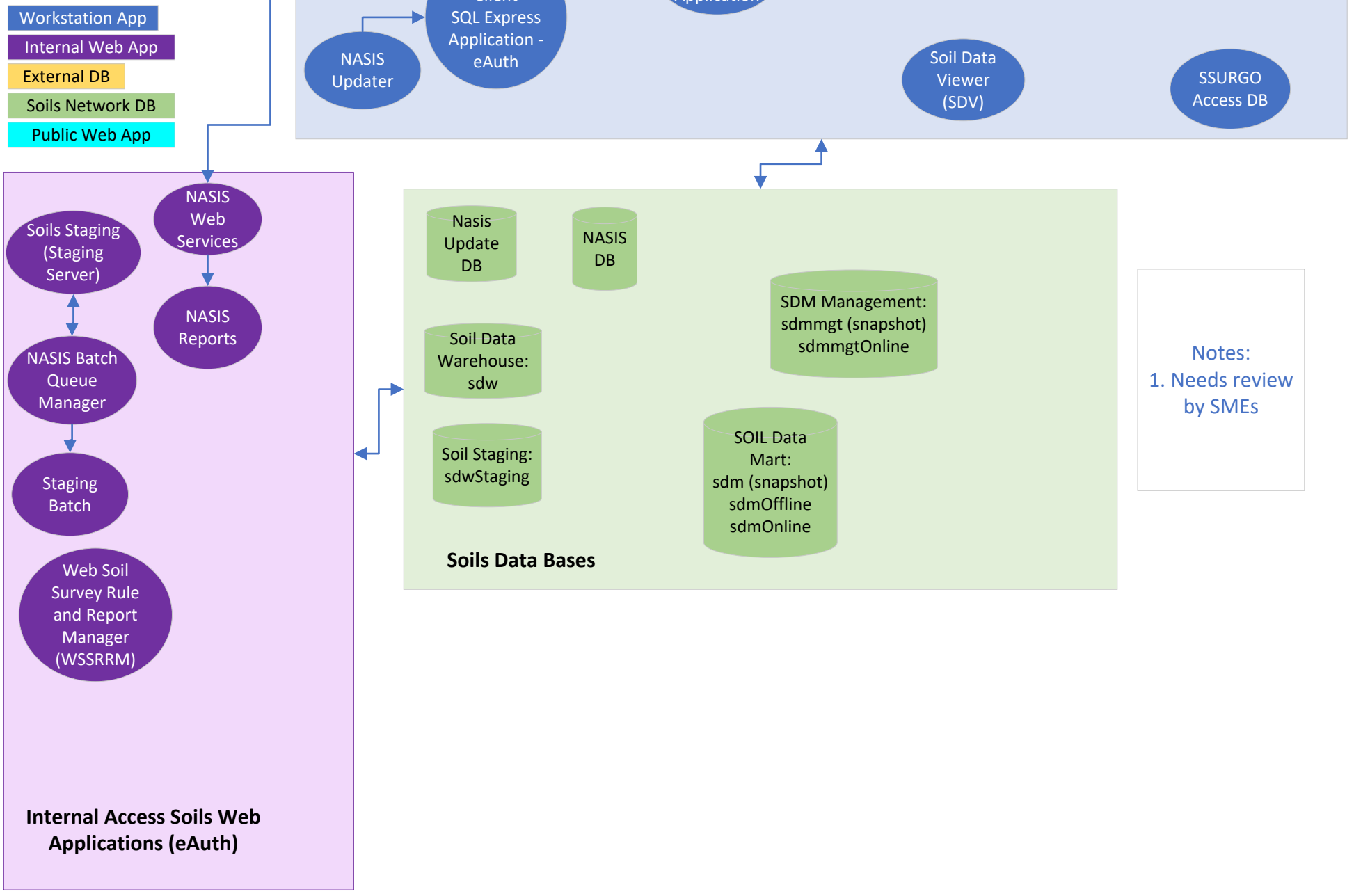
Workstation App
Internal Web App
Soils Network DB
External DB
Public Web App

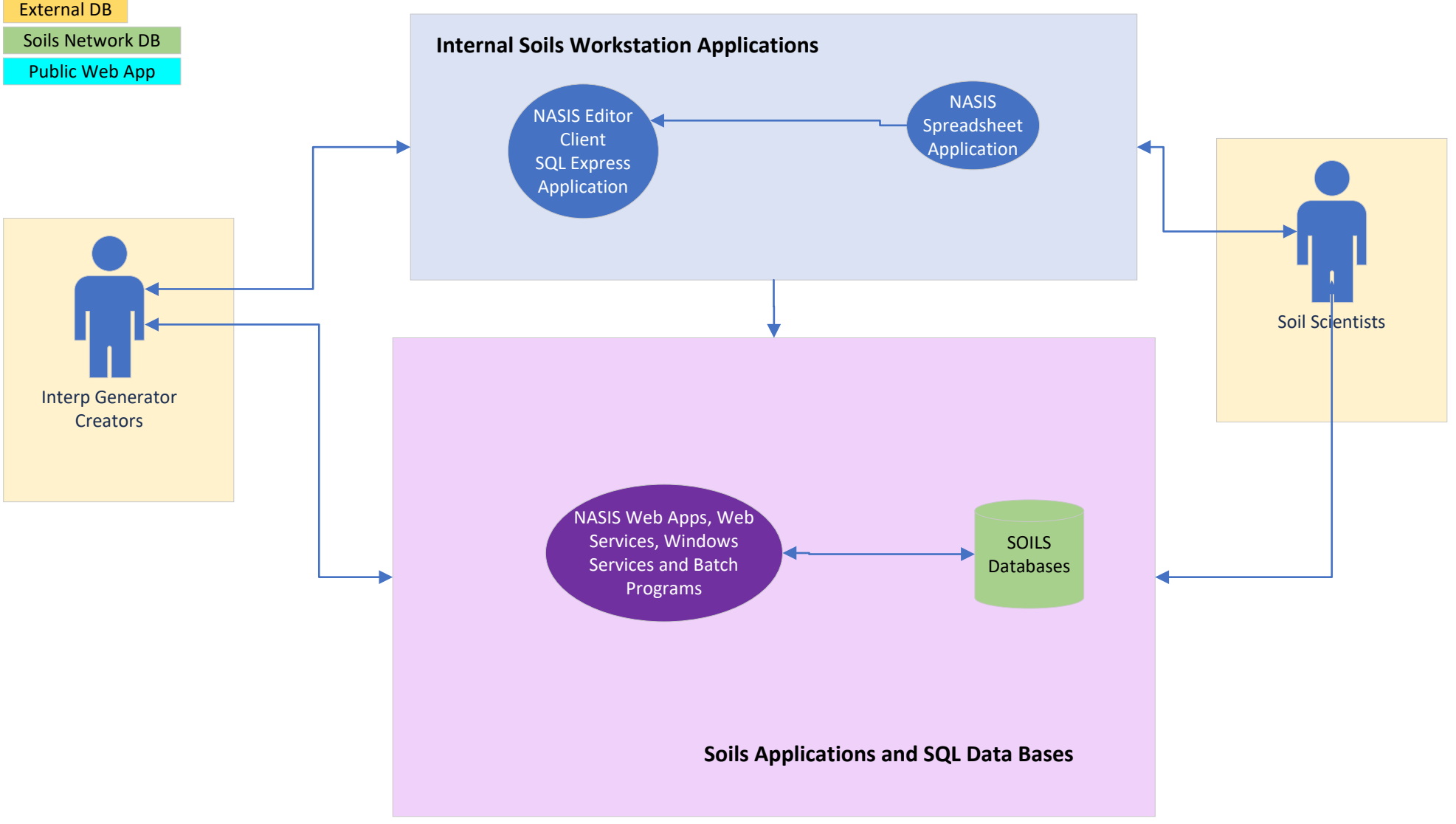


Notes:

1. Are interpretations re-generated on the Staging DB
2. Future: want data from EDIT, Plants, ……many more
3. GitHub – where does it fit? Dylan – stand alone, separate from NASIS. Parallel or outside of current process. Has to be brought over to NASIS client to get anything officially implemented. Also houses a lot of documentation.

SIG Applications by Platform Diagram V4 7/28/2020 DRAFT



SIG Data Users Diagram
V2 7/28/2020 DRAFT

Workstation App
Internal Web App
External DB
Soils Network DB
Public Web App