



# NextGen Update



Greg Fabian  
To  
ENLC/NTB Meeting  
June 20, 2013  
Washington, DC

# NextGen Update



- Development Project Update
- Reporting to EPA – Current Process
- Possible Future State – Reporting to EPA with NextGen

# NextGen Project Milestones



EA  
Compliance  
Certification\*:  
Feb 25, 2013

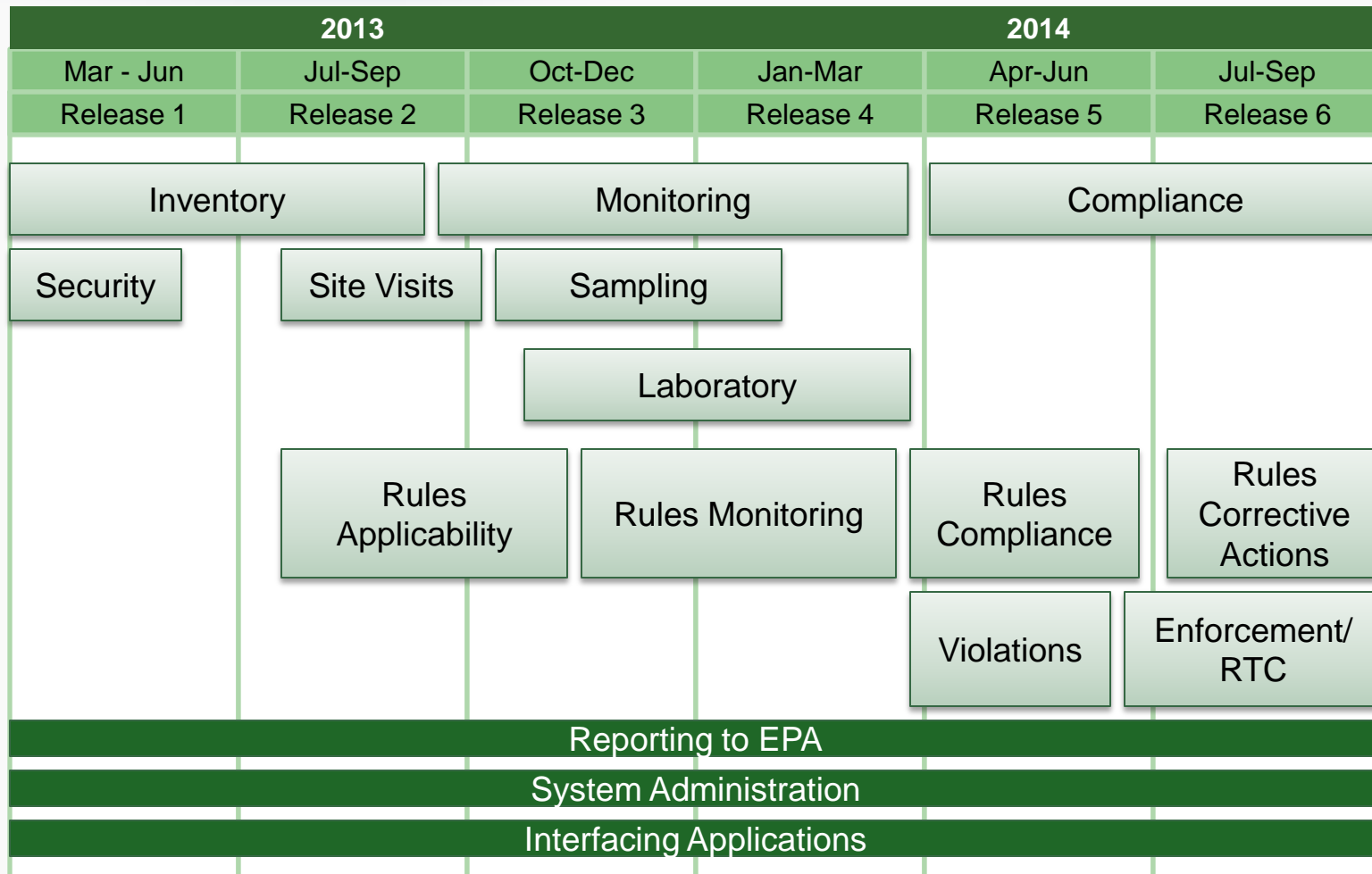
NextGen  
Goes Live:  
Sep 30, 2014

End of  
SDWIS State  
Support from  
EPA: Sep 30,  
2015

Future  
Versions of  
Next Gen

\* Approval to proceed to development

# NextGen High Level Schedule



# NextGen Update – Sprints 1-3 Complete

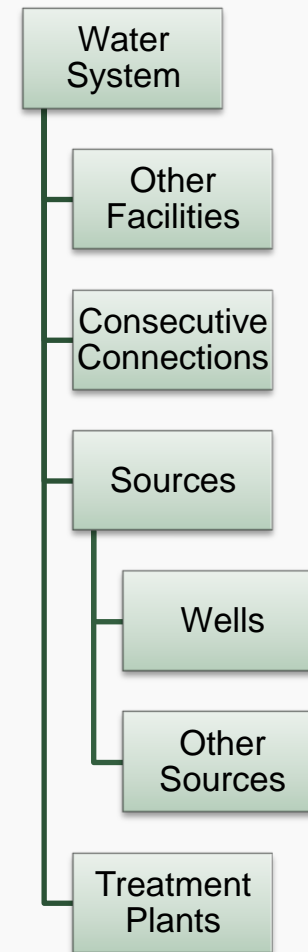


- Established dev/test environment in Amazon's "cloud"
- Integrated CDX identity management service calls
- Built framework for system administration
  - Managing user role based access
  - Primacy Agency specific system configuration settings
- Creating and managing water system objects
  - Category (Transient, Non-transient, Community/Non-Community)
  - Source water (Surface, Ground, Purchased)
  - Administrative contact information
  - Population & areas served (Counties, Cities, Tribal areas, etc.)
  - Service types (School, Hospital, Casino, etc.)
  - Ownership (Municipal, Tribal, Federal, Private, etc.)
  - Seasonality

# NextGen Update – Current Activities



- Application Sprint 4 -  
Developing features for  
managing “other” facility  
types for
  - Forms basis for all facility types
  - Planned sprint completion date  
is June 27 (Release 1)
- Rule Sprint - Analyzing  
Nitrite rule applicability,  
monitoring and compliance  
requirements



# NextGen – Upcoming Activities



**Infrastructure Sprints**  
Web Services, Interfacing Applications

**Application Sprints**  
“Core” NextGen features/functions

**Drinking Water Rule Sprints**  
Business Rules Engine programming

**Sept 30, 2014**  
**Full Operational**  
**Capability**

# NextGen –Upcoming Activities (Next 3 Months)



- Infrastructure Sprints
  - Integrating CDX self-service login request services
  - Ad hoc query tools
  - Building web services for specific data needs for interfacing applications
- Application Sprints
  - Complete building-out functions/features for managing facilities and site visits to water systems
  - Complete requirements for “Legal Entities” and schedule for sprints
  - Begin building functions/features for managing schedules
- Rule Sprints
  - Complete Nitrite, Arsenic, Inorganic Compound rule analysis
  - Integrate Nitrite and Arsenic monitoring rules into the system

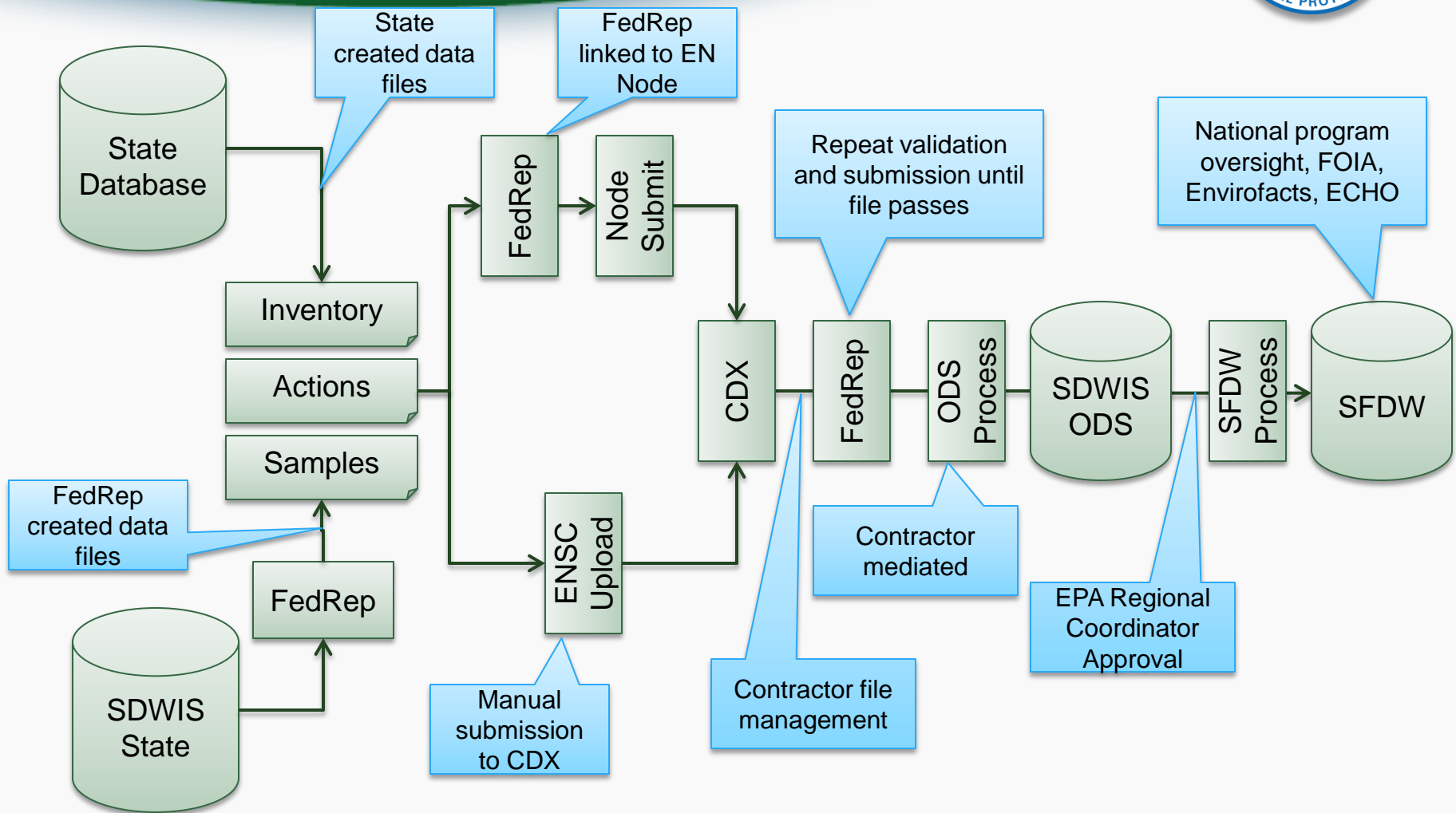


# Reporting to EPA



- Primacy Agencies report water system inventory, actions and samples data (mainly for lead and copper) every quarter
- This is a labor intensive and can be a time consuming process as shown on the next slide
- NextGen will use cloud computing and EPA shared services
- There is an opportunity to leverage the EN publishing services to simplify reporting to EPA

# Reporting to EPA – Current State



# Reporting to EPA - a Labor Intensive Process



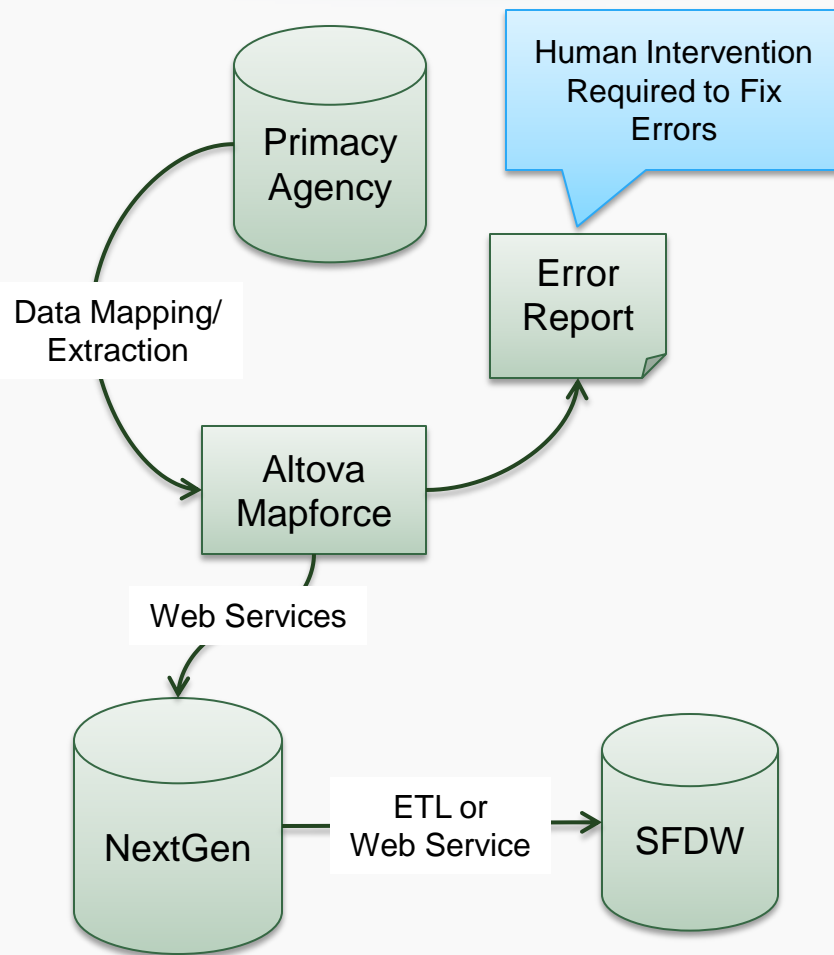
- States must submit at least 3 files per quarter
  - Non-SDWIS State Agencies must create their own files
  - FedRep extracts data from SDWIS State and writes the XML files
- Files *should* pass FedRep validation before submitting through the ENSC (manual) or EN Node/Node client (Semi-automatic)
- Contractor manages files submitted to the CDX SDWA folder
- Second FedRep pass on EPA side to validate file and data
- Files may require multiple resubmissions before they pass
  - EPA-side FedRep validation
  - ODS process to check referential integrity of submission
- EPA Regional Coordinator approval required before SFDW processing
- All Agencies must have approved submissions each quarter

# What Drives the Current Process



- 58 different SDWIS State operational databases and 9 other data bases/data stores in the Drinking Water Primacy Agencies
- Data from all these databases must be normalized and combined into a single database for reporting purposes
- Extensive error checking is required in the “back office” (SDWIS Fed side) to normalize data and ensure referential integrity
  - Often results in repeat file submissions until all errors are fixed
  - SDWIS Regional Coordinators must review and approve submissions before final process can begin
- Federal actions are not managed in the state systems (including SDWIS State)
  - States can download files containing federal actions to update their systems

# Possible NextGen Data “Submission” Scenario



- Leverage Altova MapForce to map data to NextGen web services possibly available through the EN Browser
- Error reports are still needed when submitting from a non-NextGen system
- Reporting data to EPA via
  - Publishing using a web service
  - Extract/Transform/Load process
- Process could be automated with alerts & notifications

# Questions?



Greg Fabian  
fabian.gregory@epa.gov  
(202) 564-6649