UNRBA Monitoring Program

BOC Meeting

January 2016

Jan 27, 2016

Project Update

Unrba

Cardno
Shaping the Future

FY 2016 Routine Monitoring

- Proceeding Smoothly
  - 18 Lake Loading stations
  - 20 Jurisdictional Boundary stations
  - 12 In-Lake stations (DWR sampling)
  - Monitoring data through November 2015 posted to the online database
    - Accessible through UNRBA website

Cardno®
Shaping the Future

Routine Monitoring - Data Collection Status

Date	Sample Collection	Sample Analysis	Data Review	Posted to Database
Aug-2014	✓	✓	✓	✓
Sep-2014	✓	✓	✓	✓
Oct-2014	✓	✓	✓	✓
Nov-2014	✓	✓	✓	✓
Dec-2014	✓	✓	✓	✓
Jan-2015	✓	✓	✓	✓
Feb-2015	✓	✓	✓	✓
Mar-2015	✓	✓	✓	✓
Apr-2015	✓	✓	✓	✓
May-2015	✓	✓	✓	✓
Jun-2015	✓	✓	✓	✓
Jul-2015	✓	✓	✓	✓
Aug-2015	✓	✓	✓	✓
Sep-2015	✓	✓	✓	✓
Oct-2015	✓	✓	✓	✓
Nov-2015	✓	✓	✓	✓
Dec-2015	✓			

FY 2016 Special Studies

- Sediment Evaluation Study Plan posted on UNRBA website
  - Draft report anticipated in the next few weeks
- High Flow Sampling Study Plan posted on UNRBA website
  - Awaiting suitable rain to collect next samples at eight stations
- Obtain Light Penetration Data Study Plan posted on UNRBA website
  - DWR collected data in October 2016 and provided brief report
  - Evaluating whether more data is needed for modeling, and how much
- Storm Event Sampling Study Plan posted on UNRBA website
  - Analyzing data from Sept-Oct event
- Basic Evaluation of Model Performance Study Plan posted on UNRBA website
  - Work is under way
- Recreational Use Surveys Study Plan posted on UNRBA website
  - Data compilation under way

Cardno®
Shaping the Future

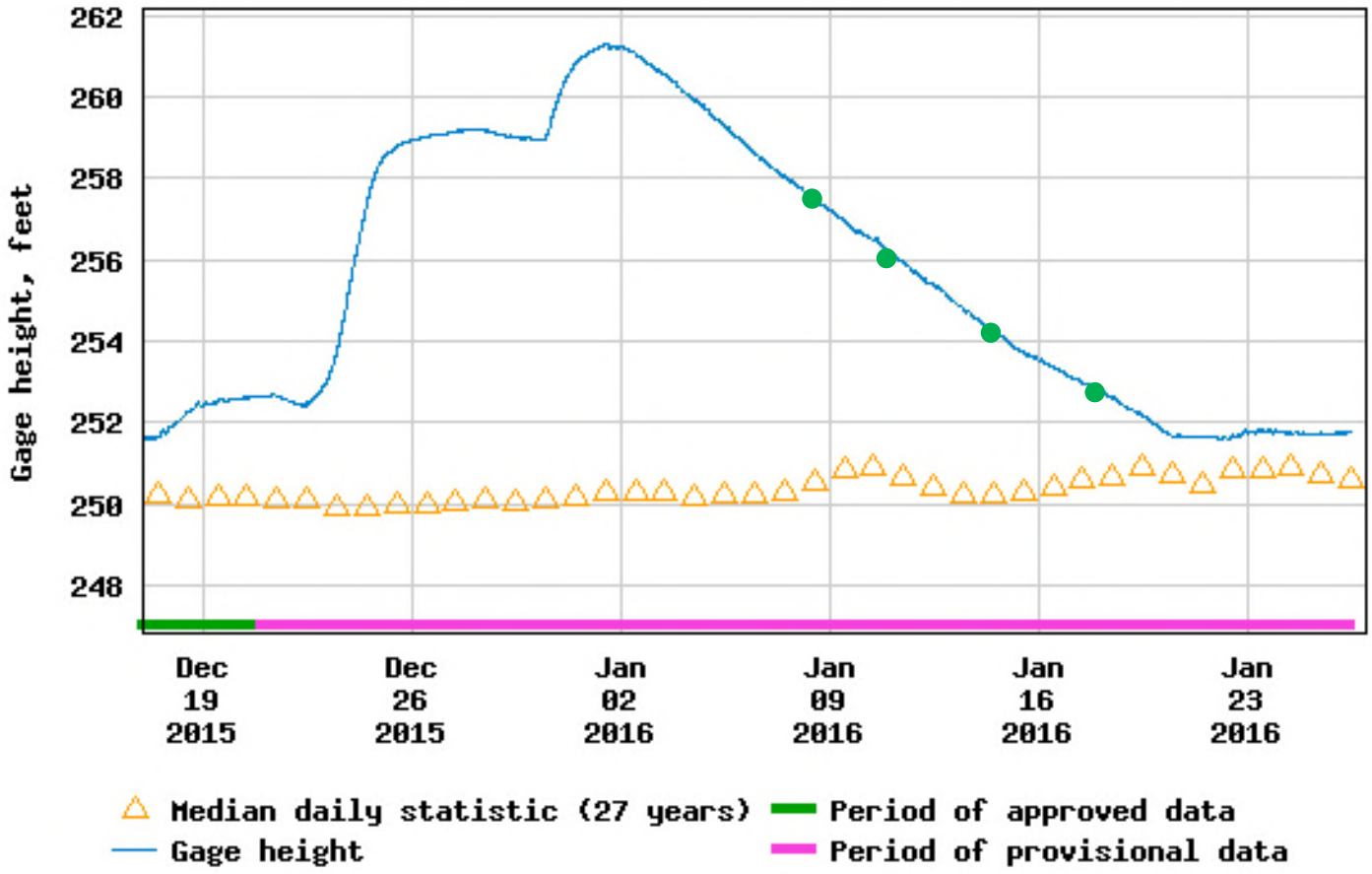
FY 2016 Special Studies

- Lake Constriction Point Study Study Plan posted on UNRBA website
  - Designed to better quantify movement of water and nutrients between segments of Falls Lake
  - Measures water velocity and water quality
  - Conducted first of two planned events in early January
  - Targets sampling during periods of higher flows
  - Data collected at the I-85 and Hwy 50 bridge crossings
  - Results will help improve new lake model

Cardno®
Shaping the Future

USGS

USGS 02087182 FALLS LAKE ABOVE DAM NR FALLS, NC

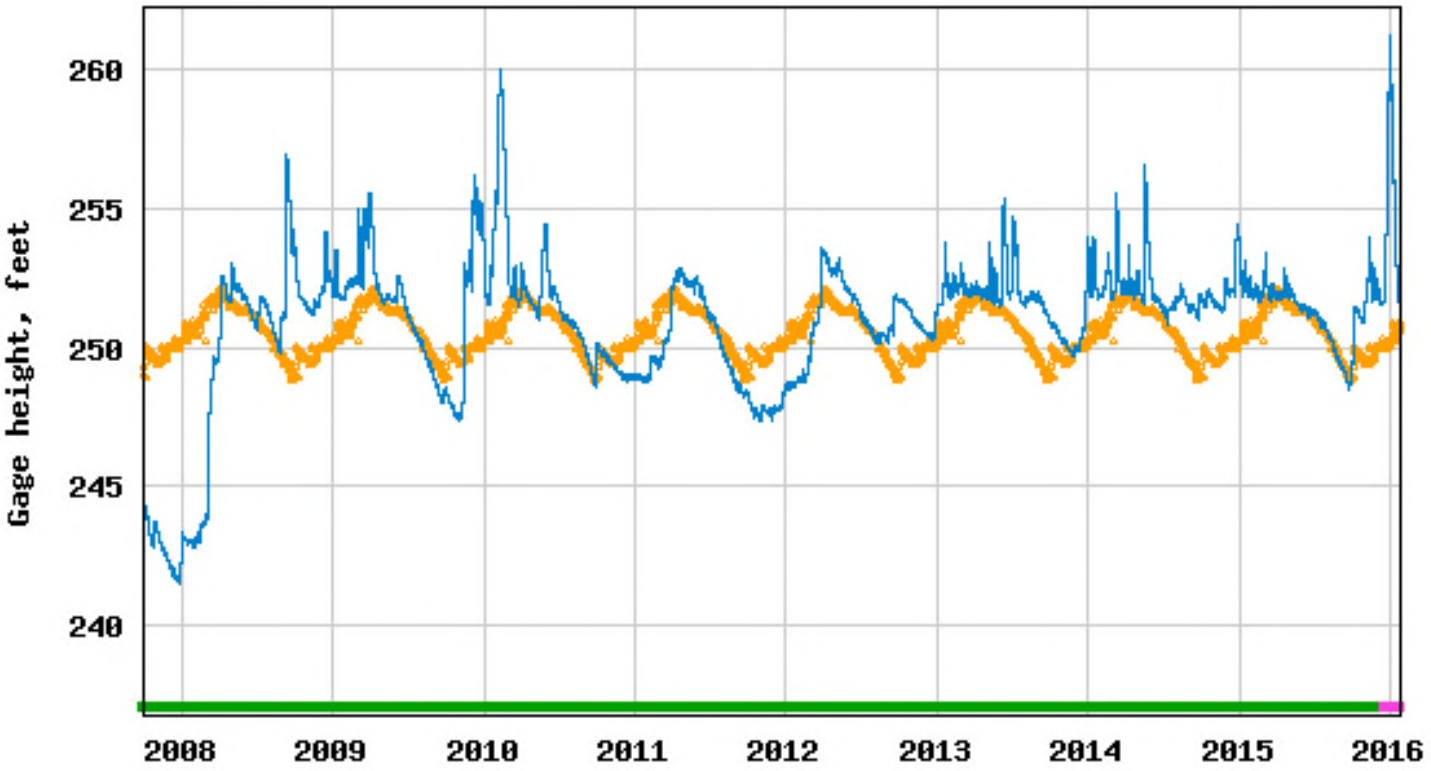


Cardno®
Shaping the Future

Cardno®
Shaping the Future

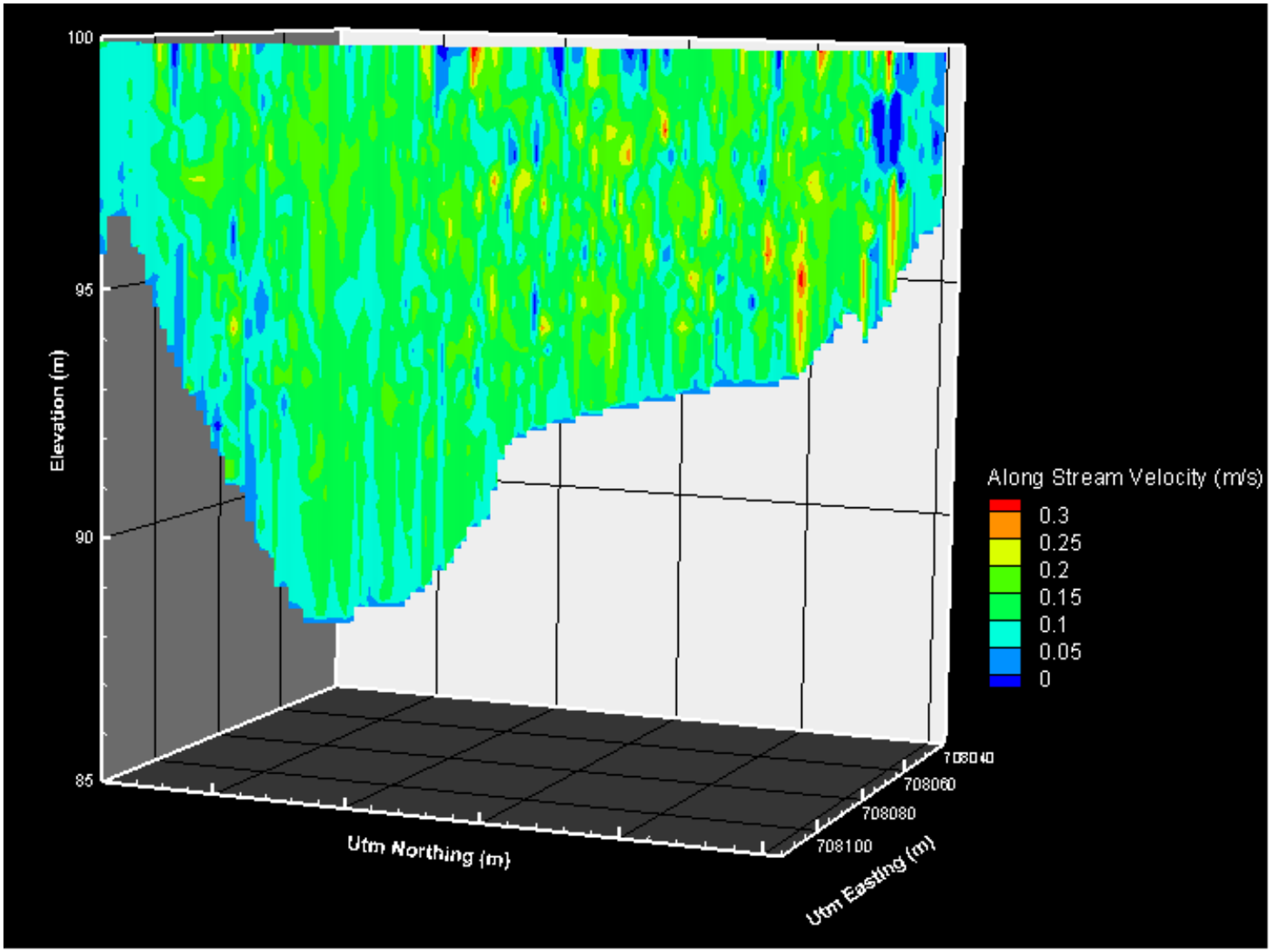
USGS

USGS 02087182 FALLS LAKE ABOVE DAM NR FALLS, NC

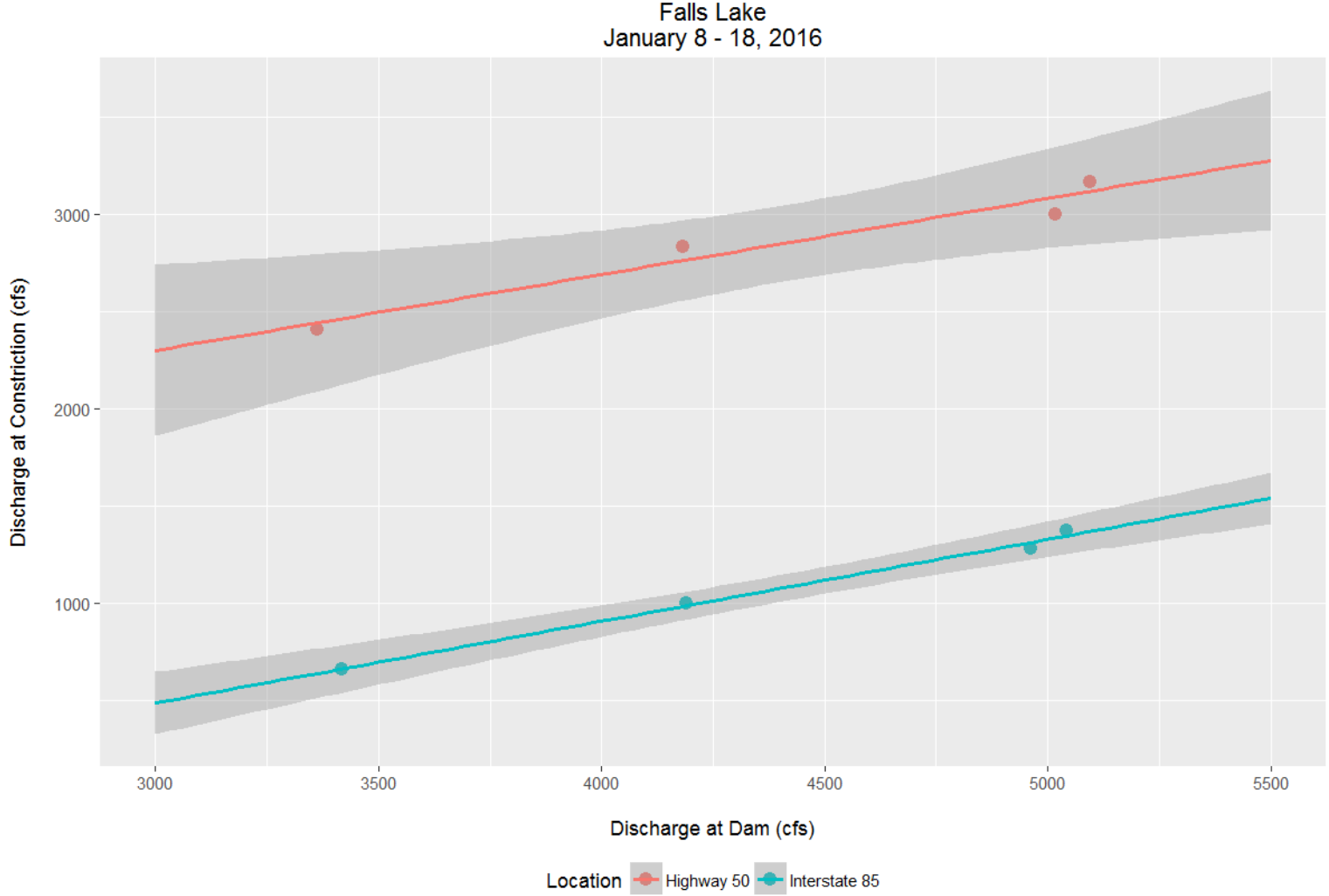


Cardno®
Shaping the Future

Cardno®
Shaping the Future



Cardno®
Shaping the Future



Cardno®
Shaping the Future

FY 2016 Special Studies

- Lake Constriction Point Study

  - Water quality results due back from the lab in February
  - Overview of findings will be presented in future PFC and BOD meetings
  - Available results will be provided in the Annual Report

Cardno®
Shaping the Future

Interim Report

- Posted on the UNRBA website
- Focuses on efforts through June 2015 (FY2015)
- Includes
  - Review of monitoring program status and data collection efforts
    - Routine Monitoring
    - Special Studies
  - Preliminary exploration of the data
  - Focuses on tributary data; lake data will be included in annual report

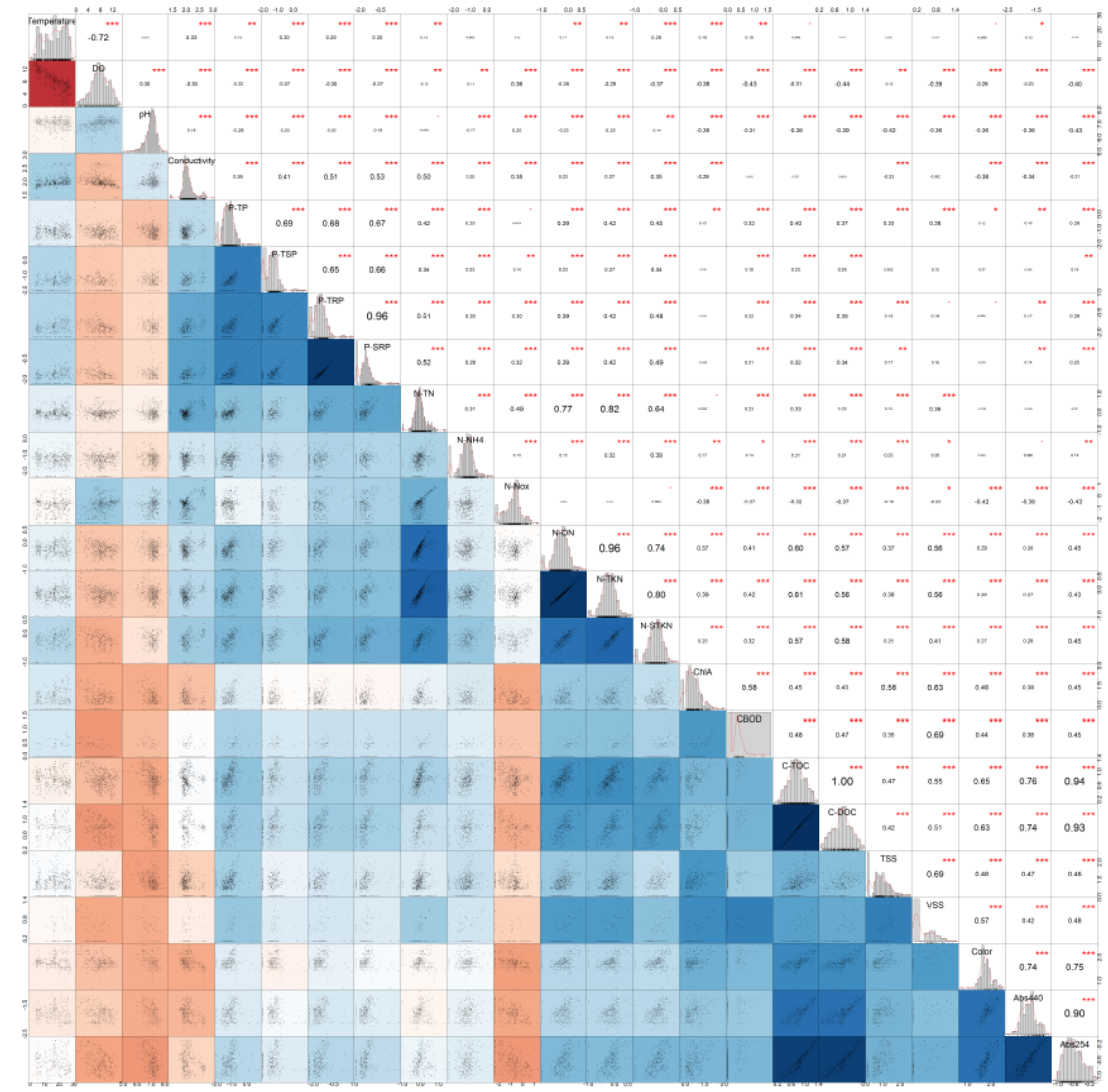
Cardno®
Shaping the Future

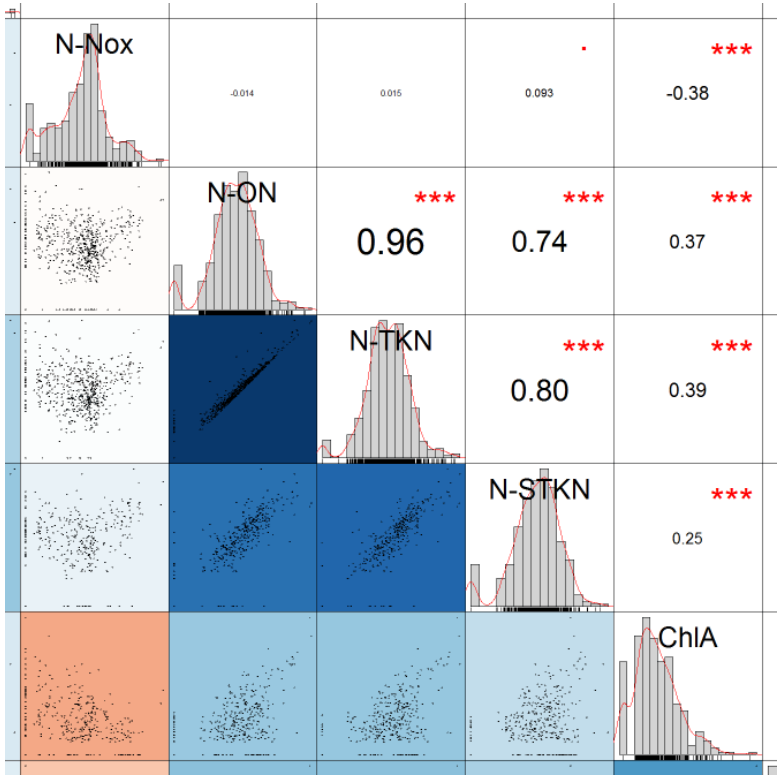
Looking Ahead

- Monitoring Program Modifications
- Developing recommendations for Routine Monitoring and Special Studies
  - To ensure optimal and cost-effective data collection
  - To help make funds available to begin modeling efforts in FY 2017

- Annual Report due in April 2016
  - Focuses on efforts through December 2015
  - Summary of all Routine Monitoring
  - Status Update and/or Results for each Special Study
  - Recommendations on Modifications to Program

Cardno®
Shaping the Future





Cardno®
Shaping the Future

Cardno®
Shaping the Future