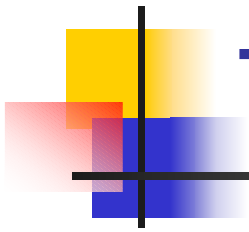


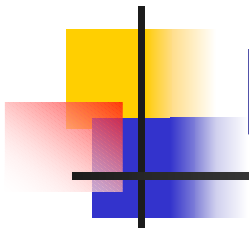
NWIS Status

Senior Staff Meeting April 23, 2002 Reston
ITAC Albany, NY May 14-16, 2002



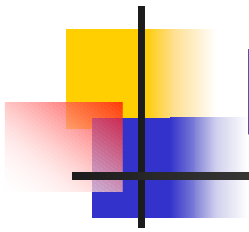
Topics

- NWIS 4_2 Schedule
- NWIS 4_2 New features
- NWIS 4_2 Training & communications
- NWIS-RT backup
- NWIS 4_2 Deployment
- Summary
- ESC issues and actions



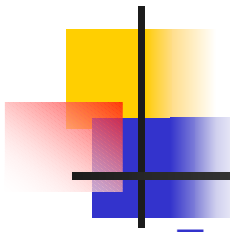
NWIS 4_2 Schedule

- User tests completed
- Data transfer verification – April 29-May 3
- System acceptance test – June 10-14
- Release for Beta installations – July 22
- General release – August 26



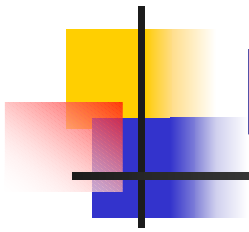
NWIS 4_2 Summary

- ADAPS – paradigm shift, restructure data
- GWSI – minor enhancements
- QWDATA – rounding enhancements
- SWUDS – paradigm shift, restructure data, Windows interface
- NWISWeb – reworking retrievals



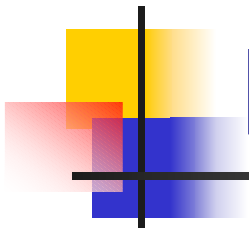
NWIS 4_2 ADAPS

- 17 “midas” tables to 70 rdbms tables
- Shift paradigm - NWIS-II
 - Shifts/ratings stored under computed timeseries
 - Improved processing of shifts
 - Improved data consistency and aging
 - Data flow more logical
- Added estimation of missing record
- Improved data editing
- Dates stored as UTC
- Referential integrity added



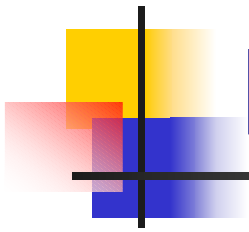
NWIS 4_2 GWSI

- Four new components
- Additions to reference lists
- Three new reference lists
- For GIS processing all decimal degree locations will be converted to NAD83



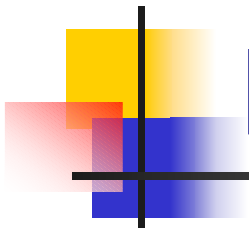
NWIS 4_2 QWDATA

1. Addition of lab standard deviation
 - A new field stored with the result
 - Values will be provided by the lab
2. Addition of a parameter-method table
 - Provides rounding arrays for parameter-method pairs
 - Improves rounding by distinguishing between methods



NWIS 4_2 SWUDS

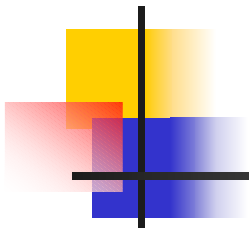
- Everything changed
- Paradigm shift to site-based data model
 - Midas tables to rdbms tables
 - Sources, places of use, returns
 - "Follow the drop" of water from place of withdrawal, to use, to return
- New data types
- Client/server environment
 - Data base on UNIX server
 - Graphical user interface in Windows



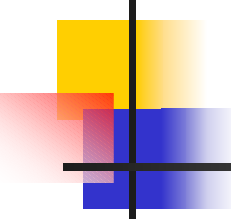
NWIS 4_2 General

- Major rework of code to change station id
- Major rework of code to move data between installations

Training

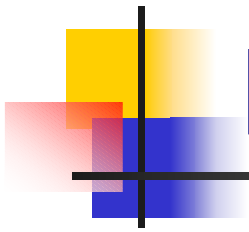


- Lead, Jim Kolva, OSW
- NTC, train-the-trainer, OSW/NWIS
 - 2 classes, 25 trainees each, 1 from each District
 - Training material provided for each trainee
 - Trainees pair up for District training
- Cyber Seminars
 - ADAPS pre-transfer issues
 - Several to focus on new features



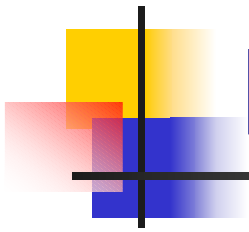
Communications

- NWIS QW graphics problem, SPLUS & Solaris 8
- NWIS 4_2 release
 - Pre-install email and web pages
 - Announcement of release
 - Announcement of NTC training
 - Announcement of Cyber seminars
- NWIS-RT
 - Prototype plans just announced
- NWISWeb monthly summary
- NWIS future
 - ESC to send email



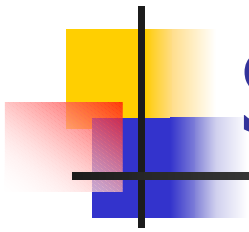
NWIS RT Backup

- Prototype for 10 Districts
 - Gain experience
 - Provide some initial backup
- Five backup servers, 2 Districts on each
 - ADAPS SATIN/SENTRY always running
 - Web display limited to only 1 District per server
- NC, PA, New England, FL(Miami), TX, WA, LA, CA, AR, HI



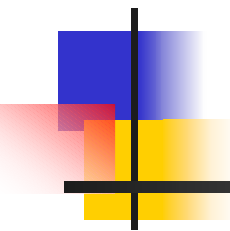
NWIS 4_2 Deployment

- Short period for District installation (Sept-Oct)
- Most complex release with longest data transfer time
- NWISWeb must work with 4_1 and 4_2
- NWIS RT services must be re-established

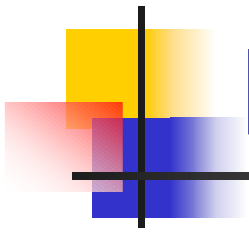


Summary

- NWIS 4_2 completes initial effort to modernize data base and add some critical functionality
- Stage set to work with ESC to carve out the future

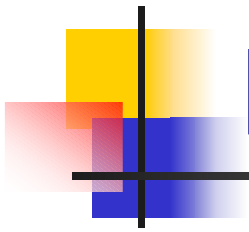


NWIS ESC Status



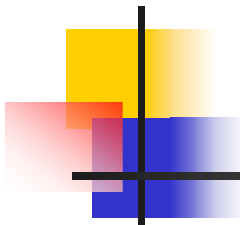
NWIS User Groups

- **ADAPS** – OSW has committed to fund 2 FTE. Joe Nielsen (ME) will work 1/2 time on user group activities. ADAPS user group is moving to be more like the QW user group.
- **SWUDS** – Need to re-evaluate the membership of this user group. Current SWUDS has limited use, but WU Specialists are excited about the new software. ESC will discuss the future of the water use databases and software based on the future plans of the USGS in Water Use.



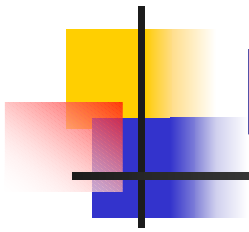
NWIS/STORET

- There are still many unresolved issues related to the exchange of NWIS and STORET data. There is much conflicting info on the future direction of STORET and the CDX project. The issues are not being resolved through USGS participation in CDX project meeting.
- NWIS ESC recommends that Bob Hirsch meet with EPA Office of Water staff to begin to resolve the issues at a high level.



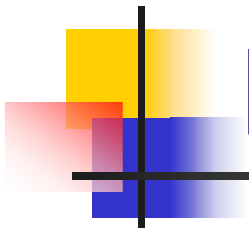
NWIS Future Architecture

- NWIS ESC developed some overall goals and constraints to provide a framework for the NWIS future architecture.
- Some of the NWIS architecture decision are dependent on the activities of the Bureau.



NWIS Future Architecture Framework

- **Network Capacity and Reliability** – We need to estimate needed bandwidth and reliability under different NWIS architecture scenarios and assure our selected architecture is compatible with the Bureau's telecommunication plans
- **Open System and Standards vs. Vendor Centric** – We need to continue to evaluate options and will do this through architecture pilot projects.



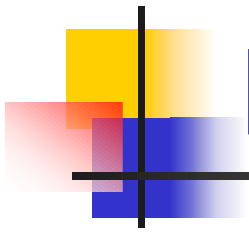
NWIS Future Architecture Framework

- District control of server and production database
 - Owner of data will have control of data
 - No more decentralized than now – production and use
 - NatWeb will be up and functional by end of FY03



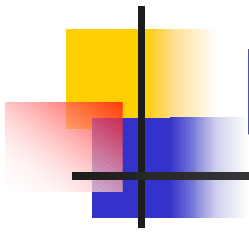
NWIS Future Architecture Framework

- Need to consider how much to invest in NWIS for better data and lower data production and delivery costs.
- NWIS should focus on activities that:
 - Improve work efficiency
 - Improve data quality
- The ESC should be a champion for increased resources for NWIS – potential pathways:
 - Discuss at Sr Staff
 - Use Exhibit 300 process
 - Include an NWIS component in increases for other programs
 - Develop external constituency



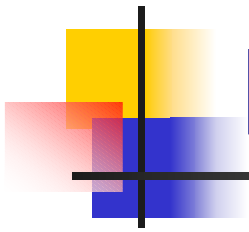
NWIS Future Architecture Framework

- Release 5.0 – Because of the focus of the NWIS staff on release 4.2, and the need to evaluate critical technologies, refine the future architecture, and provide training on selected tools and methods, the NWIS release 5.0 scope and target release date cannot be set at this time.



NWIS

- A list of districts that use NWIS View will be provided to the Regional Hydrologist so that they can encourage districts to check their databases.



NWISWeb

- NWIS ESC decided to change the priorities for NWIS Web for work efforts after the release of 4.2. The priorities for improvements are:
 1. External users
 2. Both internal and external users
 3. Internal users