

Setting the Context: The Watershed Condition Framework



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Background

Watershed Restoration is not new to FS

- Organic Act of 1897 - “secure favorable conditions of flow”
- Watershed Condition assessments
- Watershed condition improvement performance measures

Secretary's Vision



"Clean, healthy forests are vital to our efforts to protect America's fresh water supply."

"Our nation's economic health, and the health of our citizens, depends on abundant, clean and reliable sources of freshwater."

"The Watershed Condition Framework and map will help provide economic and environmental benefits to residents of rural communities."

-Secretary Vilsack, June 3, 2011, WCC Map Rollout

Forest Service Approach

- Develop a comprehensive approach to strategically implement integrated restoration on watersheds on National Forests and Grasslands
- Develop an outcome-based performance measure for documenting improvement to watershed condition at Forest, Regional, and National scales
 - Performance Measure = Change in watershed condition class

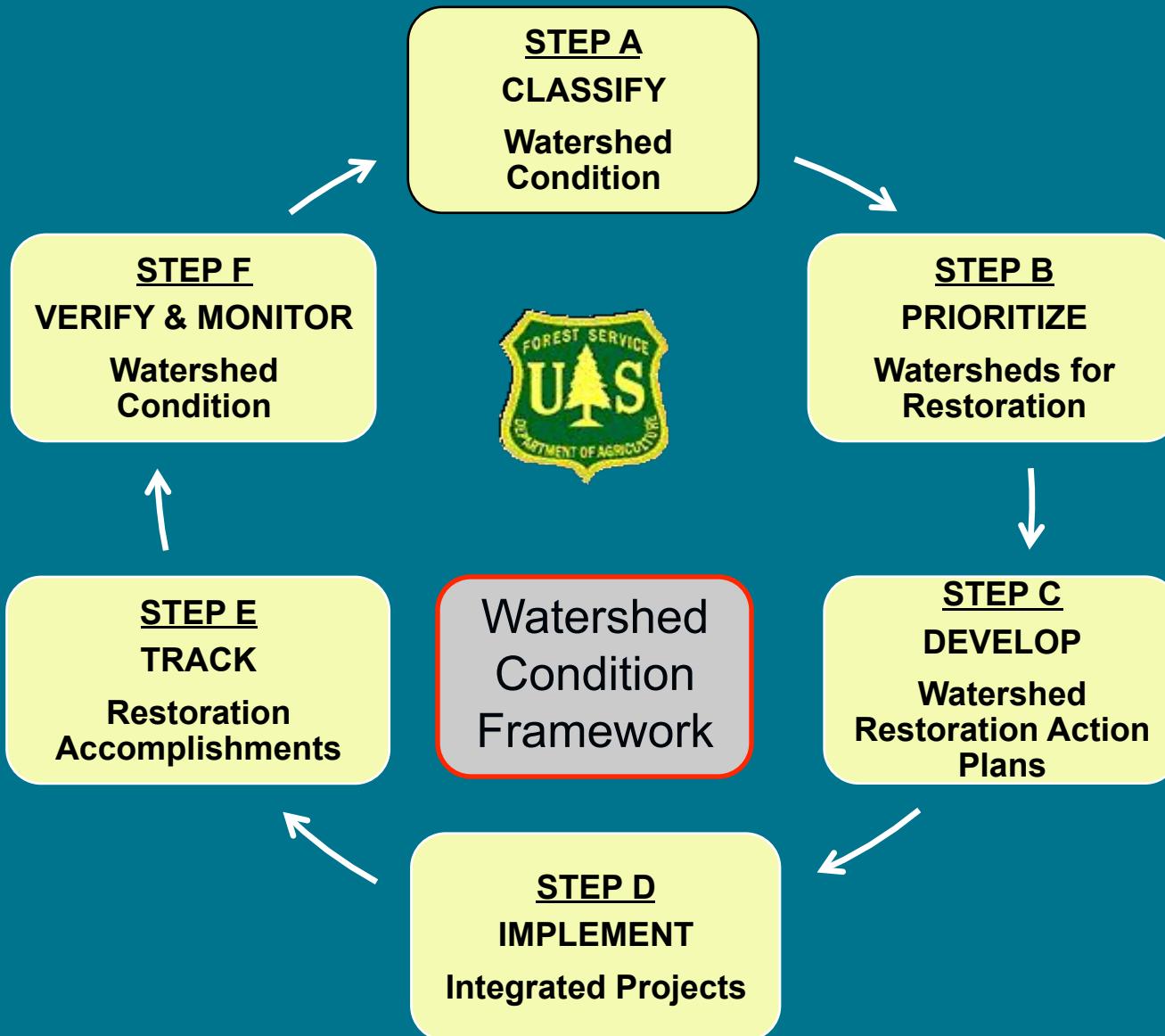
Desired Outcomes

- Establish a consistent, comparable, credible process for determining Watershed Condition Class
- Strengthen the effectiveness of Forest Service watershed restoration by focusing efforts
- Enhance coordination with external agencies and partners
- Enable a priority-based approach for the allocation of resources for restoration
- Improve Forest Service reporting and tracking of watershed condition

Required Outcome

- Be able to demonstrate at a national-scale that watershed condition has improved as a result of Forest Service integrated restoration activities
 - The national outcome-based performance measure is “number of watersheds moved to an improved condition class”

Watershed Condition Framework



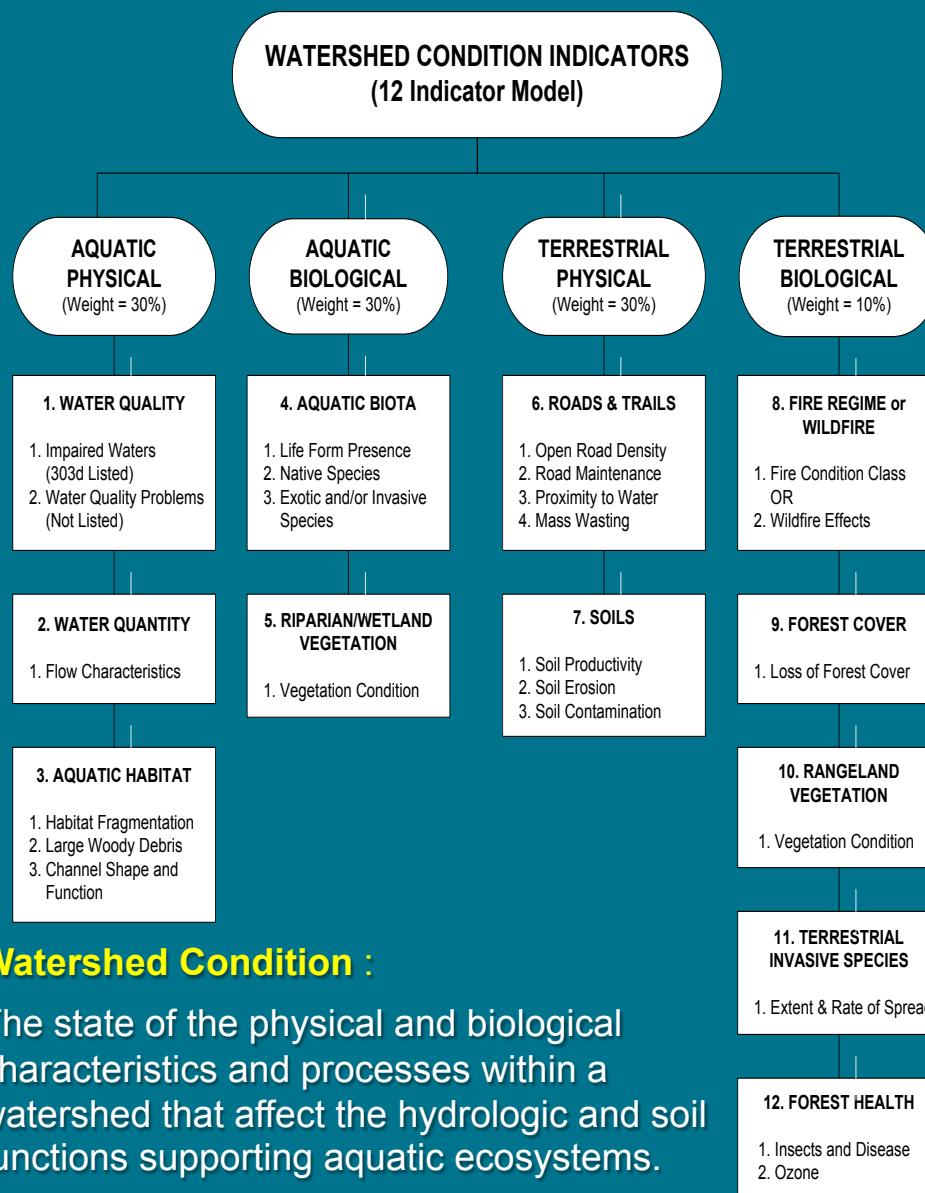
STEP A
**Classify Watershed
Condition**

Classify Watersheds

1. National Forest-based reconnaissance-level office evaluation of watershed condition
2. Achievable within existing budgets and staffing
3. A core set of 12 national watershed condition indicators
4. Relies on professional judgment exercised by Forest interdisciplinary teams, local data, and GIS data layers and national databases to the extent they are available

Rapid Assessment to achieve National Baseline

Watershed Condition Indicators



1. Water Quality
2. Water Quantity
3. Aquatic Habitat
4. Aquatic Biota
5. Riparian/Wetland Vegetation
6. Roads and Trails
7. Soils
8. Fire Regime or Wildfire
9. Forest Cover
10. Rangeland Vegetation
11. Terrestrial Invasive Species
12. Forest Health

Watershed Condition :

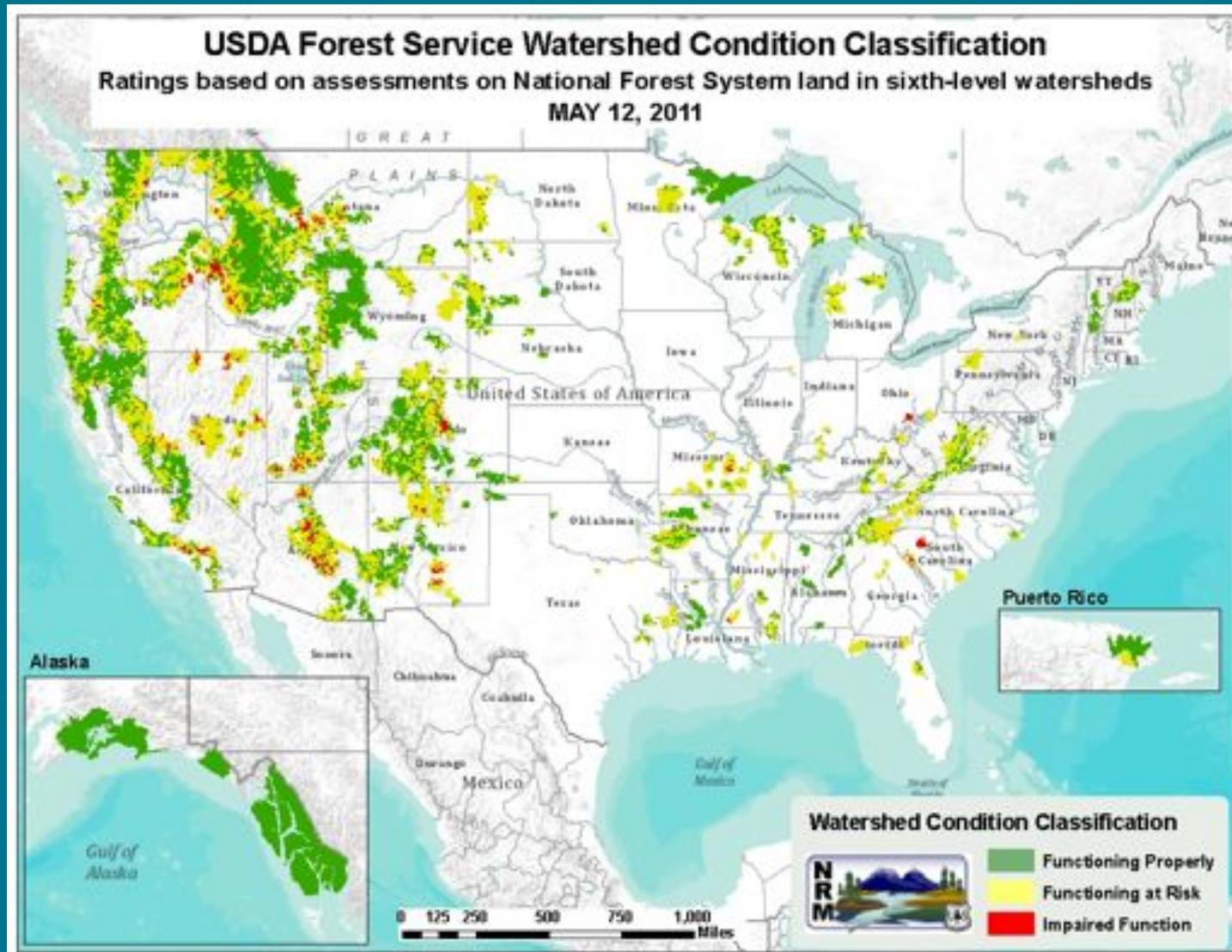
The state of the physical and biological characteristics and processes within a watershed that affect the hydrologic and soil functions supporting aquatic ecosystems.

Watershed Condition Class

Watershed Condition Classification:

The process of describing watershed condition in terms of discrete categories (or classes) that reflect the level of watershed health or integrity. The classes are: (1) Functioning properly, (2) · Functioning at risk, (3) Impaired function.

Map of Condition Class National Forest System Watersheds



National Watershed Condition Class (WCC) Results – NFS Watersheds

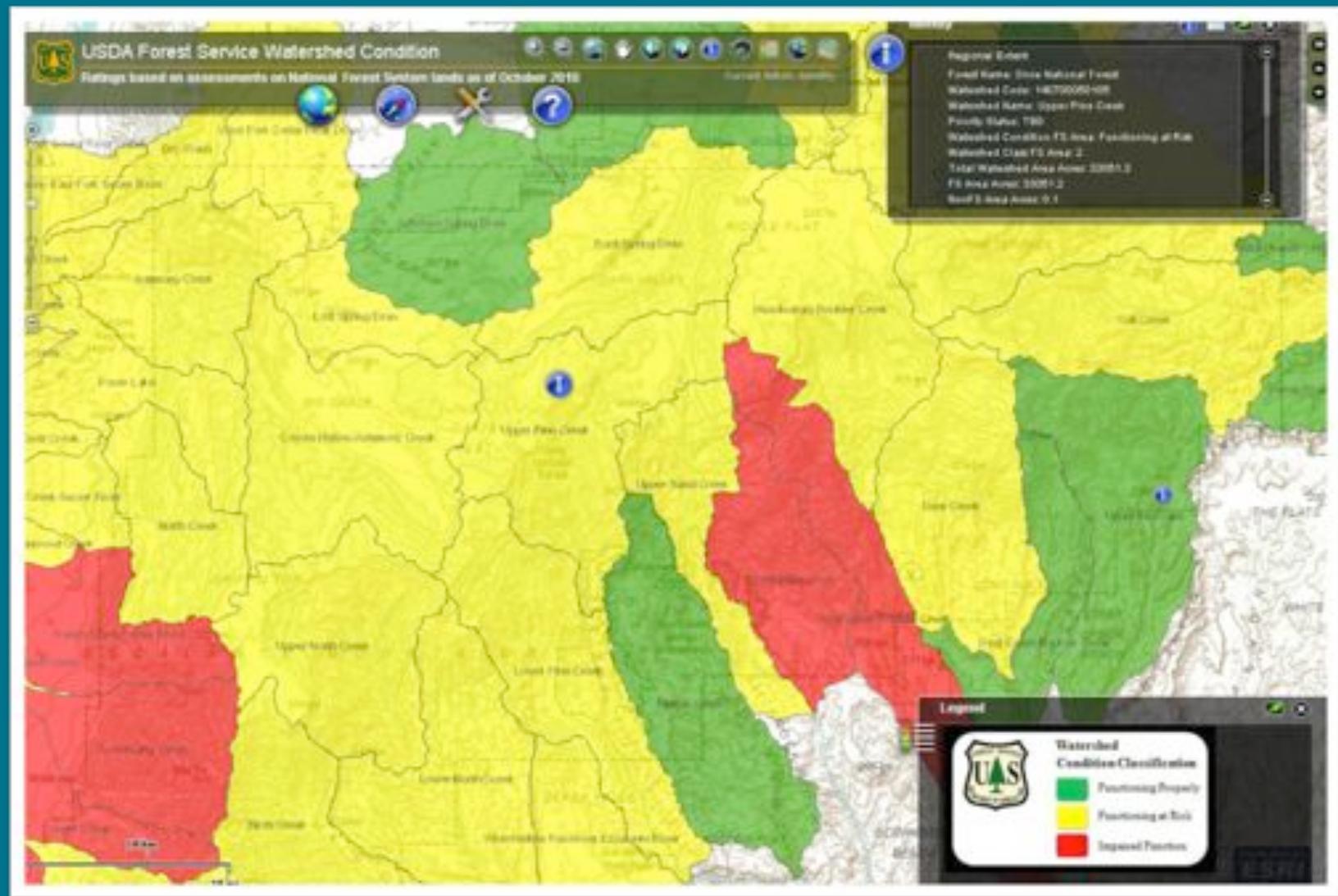
Class 1- Functioning Properly	7,882	52%
Class 2- Functioning at Risk	6,751	45%
Class 3- Impaired Function	431	3%
Total watersheds	15,064	

Interactive Map of Condition Class

<http://www.fs.fed.us/publications/watershed/>

- Overall condition classification ranking and the ranking of its 12 watershed condition indicators.
- Important information on potential needs for watershed restoration and maintenance.
- Increases the public's awareness of their local watershed conditions and the role they can play in improving them.
- Shapefile available for GIS analysis.

Interactive Map of Condition Class



STEP B
**Prioritize
Watersheds for
Restoration**

Identify priority watersheds for restoration

- A small number equivalent to a 5-year program of work (2- 5 per Forest)
- Address partnership opportunities and considerations.
- Areas with special designation:
 - Designated municipal watershed (source-water protection areas)
 - Outstanding Resource Waters
 - Designated wilderness

STEP B

**Prioritize
Watersheds for
Restoration**

Identify priority watersheds for restoration

- Ecological, social, economic considerations
- Alignment with national/regional strategies and Forest Plan direction
- Reflecting outside Agency efforts and partnership opportunities
- Completed at the Forest/Grassland level using an interdisciplinary team process.

STEP C

**Develop
Watershed
Action Plans**

Develop action plans for priority watershed

- ❖ Field assessment to document specific problems
- ❖ Identify essential projects that address the problems
- ❖ Implementation schedule
- ❖ Involve potential partners
- ❖ Monitoring plan

Essential projects are a discrete group of conservation actions and treatments that are implemented as an integrated suite of activities, focused primarily on restoring or protecting watershed health and therefore improving watershed condition class.

STEP D

**Implement
Integrated
Projects**

Implementation

- May take 1-6 years or longer
 - Planning, project design, NEPA, implementation

A watershed is considered to have moved to an improved condition class when all of the essential projects identified in a Watershed Restoration Action Plan are completed.

STEP E
**Track Restoration
Accomplishments**

Tracking

- Essential project completion in priority watersheds
- Change in condition class due to other reasons (major disturbances, other agency's actions, etc.)
- Beginning to look at Outcomes as well as Outputs:
 - ✓ Outputs still recorded for traditional accomplishment reporting.
 - ✓ Outcomes to be tracked for accountability.

STEP F
**Monitor and
Verification**

Two-tiered approach for monitoring

Tier 1 – Performance accountability

A sample of watersheds evaluated annually for classification process and project completion/ anticipated results

Tier 2 – Comprehensive monitoring

Demonstrate that concentration of activities within watersheds improves stream and habitat conditions

Looking to the future



- Completion of WCF Step B (Priority Watersheds) and Step C (Action Plans) by Forests by end of September
- Finalize performance measures and databases
- Tier 1 performance accountability reviews
- Develop Tier 2 monitoring approach
- Have information from Steps B and Step C available to the public by end of 2011.

Why your engagement is important today

- The emphasis on water and watershed restoration is critical to Nation's health and FS's role.
- The FS must be able to demonstrate accomplishment and accountability in watershed restoration
- For the first time, we have a tool to systematically demonstrate accomplishment
- The WCF is not perfect. It will evolve over time.
- Your engagement will help to shape the future of WCF so that it works FOR you

QUESTIONS & DISCUSSION

