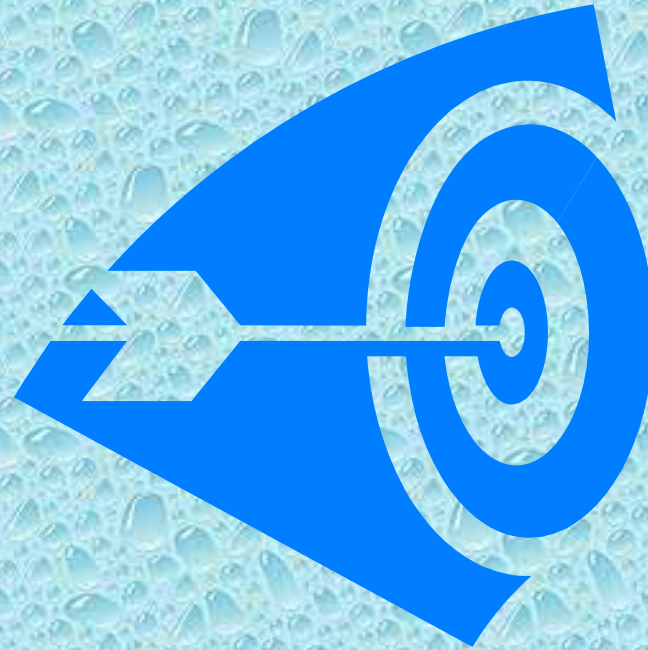


WHERE SHOULD WE BE
GOING; WHAT SHOULD WE
SHOOT FOR?



MYRON J. HESS
NATIONAL WILDLIFE FEDERATION

“WHAT IF” PERSPECTIVE

- WHO KNOWS WHAT IS POSSIBLE IF WE CHOOSE TO BELIEVE?



FEDERAL CLEAN WATER ACT: DEFINING THE BULLSEYE

“THE OBJECTIVE OF THIS CHAPTER IS
TO RESTORE AND MAINTAIN THE
CHEMICAL, PHYSICAL, AND
BIOLOGICAL INTEGRITY OF THE
NATION’S WATERS.”

33 USC § 1251 (a)

RESTORE AND MAINTAIN



USGS

RESTORE AND MAINTAIN



TPWD

CHEMICAL INTEGRITY

- TRADITIONAL AREA OF FOCUS
CHEMICAL BY CHEMICAL ALONE IS A
LOSING BATTLE

~ 15,000 CHEMICALS IN USE
(70,000)

CUMULATIVE EFFECT

E.g., COAL TAR SEALANTS



PHYSICAL INTEGRITY

- EXTREMELY POOR TRACK RECORD
- STRAIGHTENED, CHANNELIZED, AND LINED
- ERODED, DEGRADED, AND OVERWHELMED
(Urban Stream Syndrome)
- LONGSTANDING DISCONNECT BETWEEN WATER QUALITY AND QUANTITY

BIOLOGICAL INTEGRITY

- RECORD IS MIXED, AT BEST
- CAN BE DIFFICULT/EXPENSIVE TO MEASURE
- MAY BE HARD TO IDENTIFY SPECIFIC CAUSE



TARGETS ALONG THE WAY

- RECONNECT COMMUNITIES WITH WATERBODIES
 - RECOGNIZE HOW VALUABLE URBAN STREAMS ARE/CAN BE
 - MANAGE STORM WATER QUALITY AND QUANTITY TO ENHANCE THAT VALUE
 - ENSURE THAT WATER QUALITY STANDARDS RECOGNIZE THAT VALUE

TARGETS ALONG THE WAY

- ENHANCED FOCUS ON BIOLOGICAL MONITORING AND ON CONSEQUENCES OF ADVERSE RESULTS

TARGETS ALONG THE WAY

- STRENGTHENED COMMITMENT TO ANTIDEGRADATION PROTECTIONS
 - PROTECT EXISTING USES (TIER 1)
 - PROTECT WATER QUALITY THAT EXCEEDS FISHABLE/SWIMMABLE (TIER 2)
 - PROTECT OUTSTANDING NATIONAL RESOURCE WATERS (TIER 3)
 - CONSIDER TIER 2 1/2

TARGETS ALONG THE WAY

- GET SERIOUS ABOUT WETLAND PROTECTION/RESTORATION



Texas Sea Grant /Texas AgriLife Extension Service

TARGETS ALONG THE WAY

- EXPAND THE UNIVERSE OF WATER QUALITY PROTECTION TOOLS
 - New ways to control plastic waste



Algalita Marine Research Foundation

Holder - 84 fragments

TARGETS ALONG THE WAY

FACTOR GLOBAL WARMING INTO OUR
PLANNING

Sea level rise

Storm intensity

Increased water temperature

WE WON'T ACHIEVE IT,
IF WE DON'T AIM FOR IT



Texas Sea Grant /Texas AgriLife Extension Service