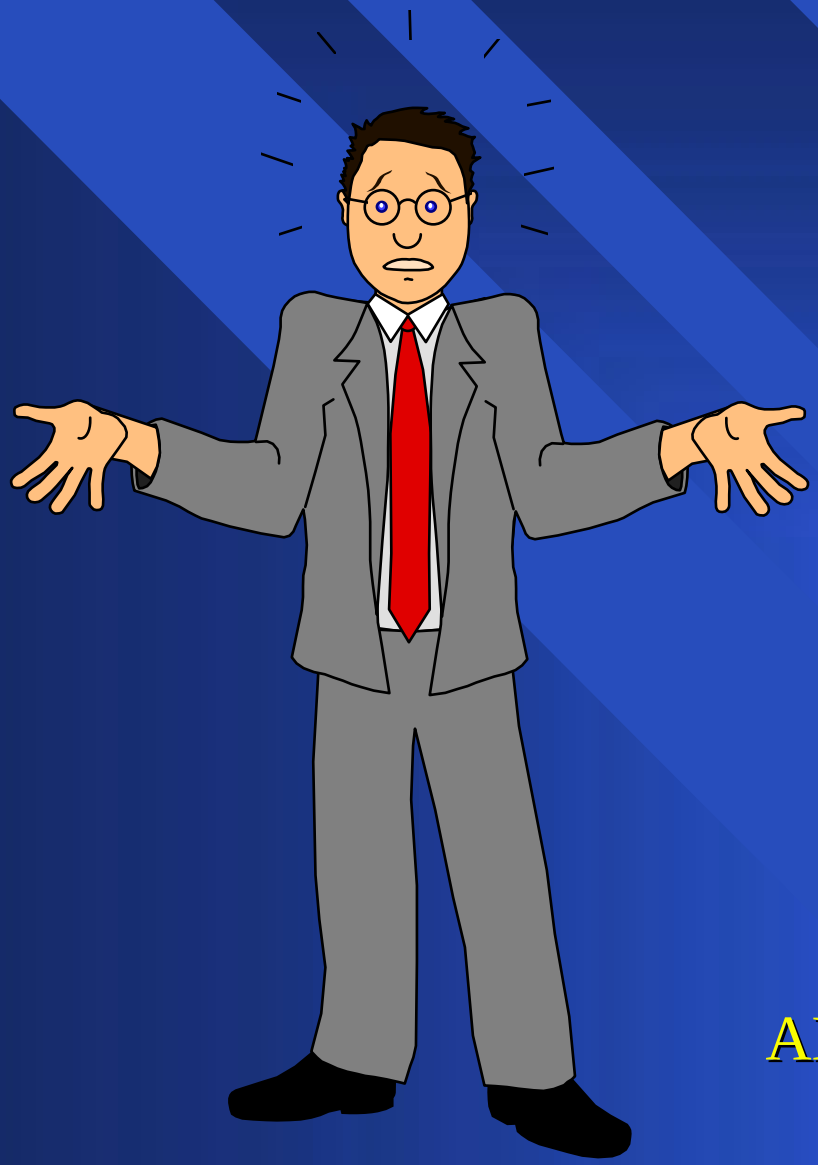
US EPA Stormwater Program's Webcast Series



Financing a Municipal Stormwater Program

Andy Reese
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US EPA Stormwater Program's Webcast Series

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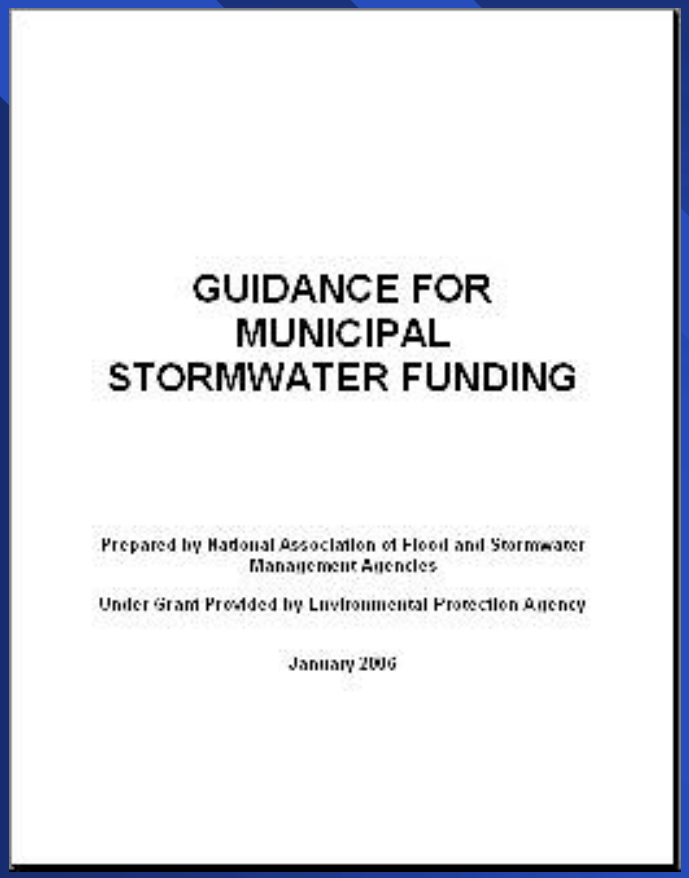
NAFSMA basis for this course


GUIDANCE FOR
MUNICIPAL
STORMWATER FUNDING

Prepared by National Association of Flood and Stormwater Management Agencies

Under Grant Provided by Environmental Protection Agency

January 2006

- David Burchmore of Squire, Sanders and Dempsey L.L.P.
- Hector Cyre of Water Resource Associates
- Susan Gilson, NAFSMA
- Doug Harrison
- Andrew Reese of AMEC Earth & Environmental
- Scott Tucker

http://www.nafsma.org/Guidance%20Manual%20Version%202X.pdf

1) What is the population served by your MS4?

A) Less than 15,000
B) 15,000 to 25,000
C) 26,000 to 50,000
D) 51,000 to 100,000
E) 101,000 to 200,000
F) More than 200,000

2) How many full-time equivalent staff does your entire stormwater program have?

A) 1-2

B) 3-5

C) 6-10

D) More than 10

Short Historical Perspective

What is driving this?

Key Trends Creating Changes in Stormwater Programs

1800 1900 2000

Exploration

Industrialization

Cultivation

Urbanization

Key Trends Creating Changes in Stormwater Programs

1800

Exploration

Cultivation

1900

Industrialization

Urbanization

2000

Gentrification

Key Trends Creating Changes in Stormwater Programs

1800 1900 2000

Exploration

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Historical Paradigm Shifts

1. **“Run it in ditches”**

2. **“Run it pipes”**

3. **“Run it in <u>stormwater</u> pipes”**

4. **“Keep it from stormwater pipes”**

5. **“Just don’t cause a flood”**

Historical Paradigm Shifts

1. "Run it in ditches"
2. "Run it pipes"
3. "Run it in <u>stormwater</u> pipes"
4. "Keep it from stormwater pipes"
5. "Just don't cause a flood"
6. "Oh… and don't pollute either"
7. "It's the ecology stupid!"
8. "Water is water is water...shed"
9. "Green & bear it"

Various Approaches

- Low Impact Development
- Multi-objective Corridors
- Integrated Site Design
- Better Site Design
- Green Infrastructure
- Conservation Design
- Green Building
- Green Technology
- Sustainable Development
- Smart Growth
- Eco-Friendly Design
- Zero Discharge
- Smart Site Development
- New Urbanism
- LEED designs

There's more coming…

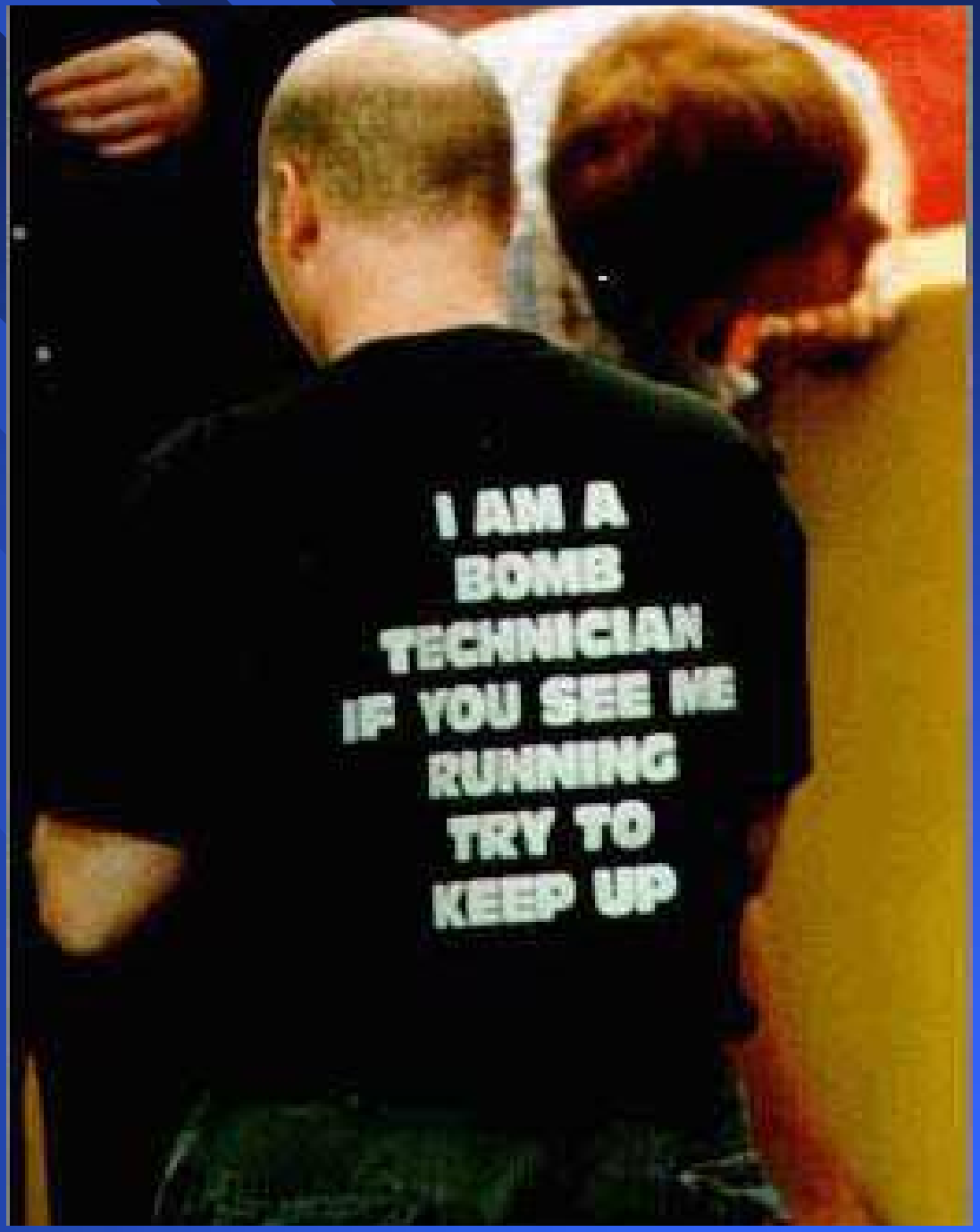
- Eventual TMDL implementation
- Wet weather standards
- Water scarcity
- Air-emission TMDL integration
- Quantity as a pollutant
- Maintenance of 10^6 rain gardens

All these paradigms lead to specific drivers for stormwater programs:

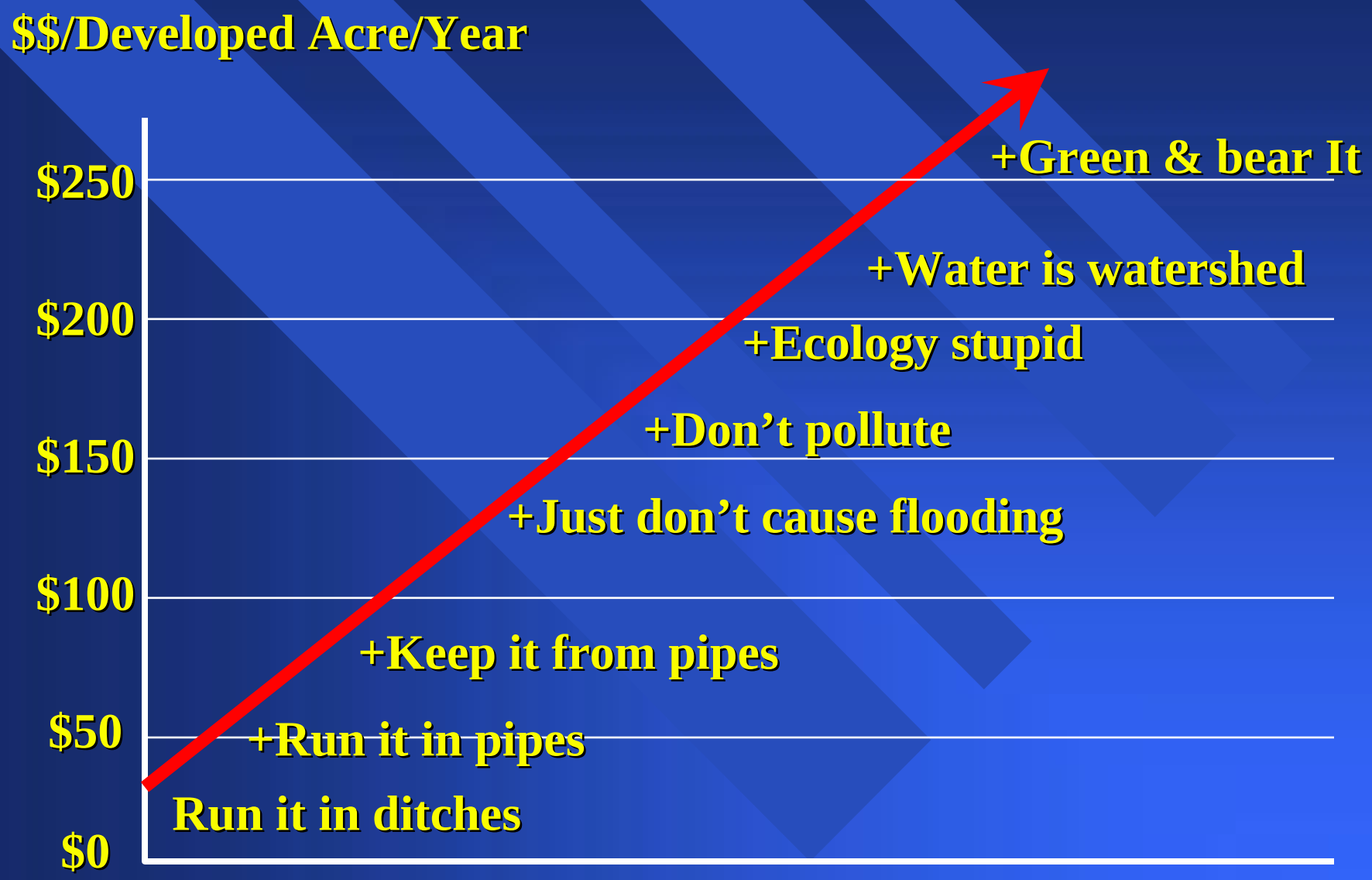
- ✓ Flooding problems
- ✓ Aging infrastructure
- ✓ Development pressures
- ✓ Erosion of channels & creeks
- ✓ Water quality & ecology
- ✓ Regulatory mandates
- ✓ Lawsuits
- ✓ Quality of life & aesthetics
- ✓ Preservation of property value

Are lots of drivers for action

… but are they <u>compelling</u> ?



“Typical” SW Program Costs



Its Not Just About Utilities

How is stormwater paid for?

1. There are about 125 funding methods and variations for local governments… some better than others…

1. There are about 125 funding methods and variations for local governments… some better than others…

2. There is a big difference between "resources", "money" and "revenue"

Resources, Money & Revenue

- Resources – free, non-monetary, donated, volunteer, goods and services
  - Your neighbor's lawnmower

Resources, Money & Revenue

- Resources – free, non-monetary, donated, volunteer, goods and services
  - Your neighbor's lawnmower
- Money – one-time, unpredictable, undependable, episodic, limited
  - You buy your own lawn mower

Resources, Money & Revenue

- Resources – free, non-monetary, donated, volunteer, goods and services
  - Your neighbor's lawnmower
- Money – one-time, unpredictable, undependable, episodic, limited
  - You buy your own lawn mower
- Revenue – regular, predictable, money, budgeted, cash flow
  - You hire a landscape firm to mow your lawn

How much of this program can you cover with money and resources?

1. Administration
   - General Administration
   - Gen Prog Planning & Dev
   - Interlocal Coordination
   - Grants Program

2. Billing And Finance
   - Billing Operations
   - Customer Service
   - Financial Management
   - Indirect Cost Allocation
   - General Government Support

3. Public Ed & Involvement
   - Public Awareness
   - SW Qual Ed & Reporting
   - Public Involvement
   - Citizen's Advisory Group
   - Non-profit Integration
   - Media Relations
   - Risk Communications

4. Technical Support
   - GIS Applications
   - Database Management
   - Mapping & Imagery
   - General Data Collection
   - Web & Customer Support

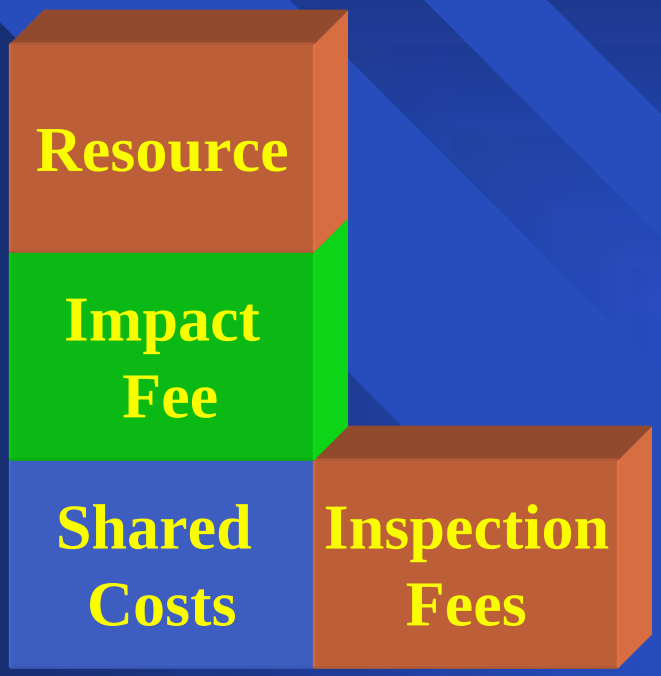
5. Engineering & Planning
   - Des Criteria, Stds And Guidance
   - Field Data Collection
   - Quantity Master Planning
   - Quality Master Planning
   - Design, Field & Ops Engr
   - Retrofitting For Water Quality
   - Hazard Mitigation
   - Zoning Support
   - Multi-objective Planning Support

6. Operations & Maintenance
   - General Maintenance Mgmt
   - General Routine Maintenance
   - General Remedial Maintenance
   - Emergency Response Maint
   - Infrastructure Management
   - Public Assistance

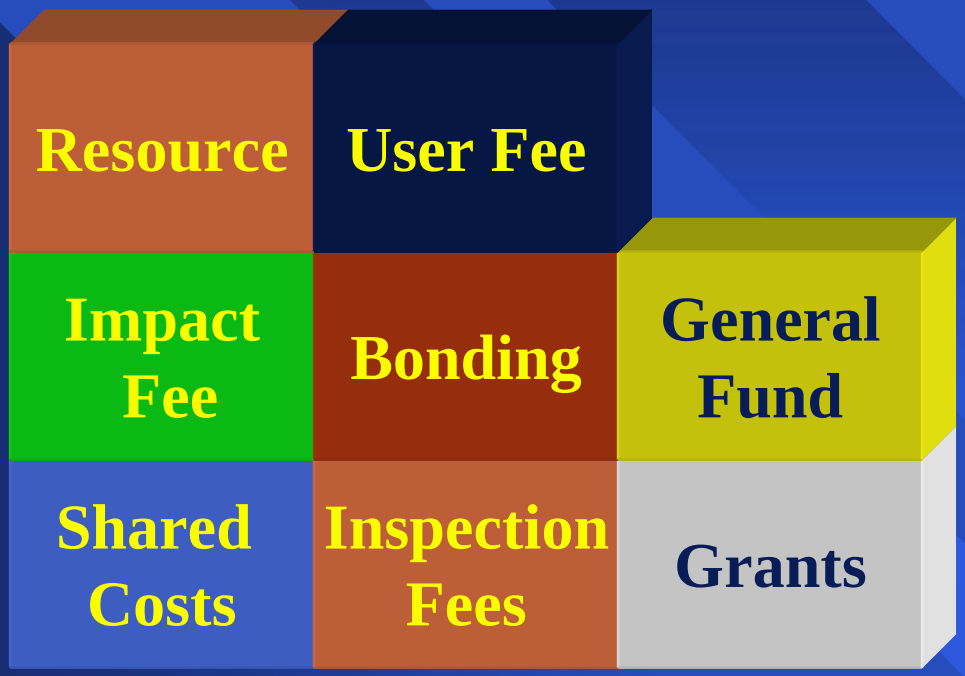
7. Capital Improvements
   - Major Capital Improvements
   - Minor Capital Improvements
   - Land, Easement, And ROW

8. Regulation And Enforcement
   - Code Dev & Enforcement
   - General Permit Administration
   - Drainage Sys Insp & Reg
   - Zoning & Land Use Reg
   - Special Inspection Programs
   - Flood Insurance Program
   - Multi-Obj Floodplain Mgmt
   - Erosion Control Program
   - Pest, Herb & Fertilizer
   - Used Oil & Toxic Materials
   - Spill Response & Clean Up
   - Illicit Con & Illegal Dumping
   - Groundwater & Drinking Water
   - Watershed Assessment & TMDL
   - Septic & I&I Program
   - Industrial Program
   - Monitoring

Building Blocks for Funding



Building Blocks for Funding



Building Blocks for Funding

Resource	User Fee	Volunteers	Fines
Impact Fee	Bonding	General Fund	Tax Assessment
Shared Costs	Inspection Fees	Grants	Special Sales Tax

“Funding” Methods

- ✓ Modify local programs
  - Local PR resources
  - Mapping and GIS
  - Current inspection programs
  - Current design criteria
  - Current field forces modifications

“Funding” Methods

- ✓ Modify local programs
- ✓ Share costs with neighbors or region/state-wide

- “Models”
  - brochures
  - ordinances
- “Joints”
  - criteria
  - PR programs
- “Bulks”
  - bulk orders on PR
  - bulk mapping
  - printing

“Funding” Methods

- ✓ Modify local programs
- ✓ Share costs with neighbors or region/state-wide
- ✓ Free stuff on the web

- Ordinances
- Brochures
- Criteria manuals
- Video clips
- Inspection Checklists
- Slide shows
- Educational materials
- BMP lists
- Contacts

“Funding” Methods

- ✓ Modify local programs
- ✓ Share costs with neighbors or region/state-wide
- ✓ Free stuff on the web
- ✓ Partner with non-profits
  - Lots of 501(c)(3) grants

- Free or mostly free
- Dedicated smart people
- Trusted more than you !
- May reduce lawsuit exposure
- Ownership of watersheds
- New funding source

“Funding” Methods

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  - Lots of 501(c)(3) grants
- ✓ Federal Programs:
  - Funding
  - “consulting”

- COE
- HUD
- EPA
- USGS
- NRCS
- TVA
- F&W
- FHWA
- FEMA
- DA

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- ✓ Corporate Sponsorship
  - Advertising
  - Environmental association

- Sponsor events
- Provide materials or donations
- Adopt a watershed
- Public-private partnerships
- Scholarships and internships
- Adopt-a-storm-drain

Adopt-a-Stormdrain or Waterway

I suppose there <u>are</u> limits !!

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- ✓ State/Regional Grants:
  - Revolving loan and State bond fund
  - 319 non-point
  - Tea-21 funds
  - 604(B) – WQ Planning
  - 104(b)(3) - Wetlands
  - NOAA & Coastal Pollution Remediation Grants
  - Wellhead Protection
  - Source Water Protection

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  - Wellhead Protection
  - Source Water Protection
- ✓ Fees for service & Innovation

Fees For Service & Other Innovation

- Plans review fees
- Stormwater “tap” fee
- Oversize latecomer fees
- Penalties and clean up charges
- Environmental impact fees
- Water, sewer or solid waste fee surcharge for surface water
- Hot spot or other “special use” inspection fee
- Environmental “check off” on electric, phone or other bill
- Redevelopment agency for “water quality urban blight”
- Community Facilities District

“Funding” Methods

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- ✓ Fees for service & Innovation
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  - Franchise Fees, Income Tax

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- ✓ Fees for service & Innovation
- ✓ The usual culprits:
  - General Fund, Sales Tax
  - Franchise Fees, Income Tax
- ✓ Stormwater utility user fees

We need to remember that different funding methods match different program needs:

- You cannot live off of grants and loans

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- There is a large human effort cost in “free” sources

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- Long-term operations make up half our program

We need to remember that different funding methods match different program needs:

- You cannot live off of grants and loans

- There is a large human effort cost in "free" sources

- Long-term operations make up half our program

- ergo: you need a mix of sources matched to the program components <u>AND</u>

-you can sometimes match a program to funding

Polling Question

3) How many people are participating in the webcast today at your location?

A) Just me
B) 2 to 5
C) 6 to 10
D) More than 10

Polling Questions

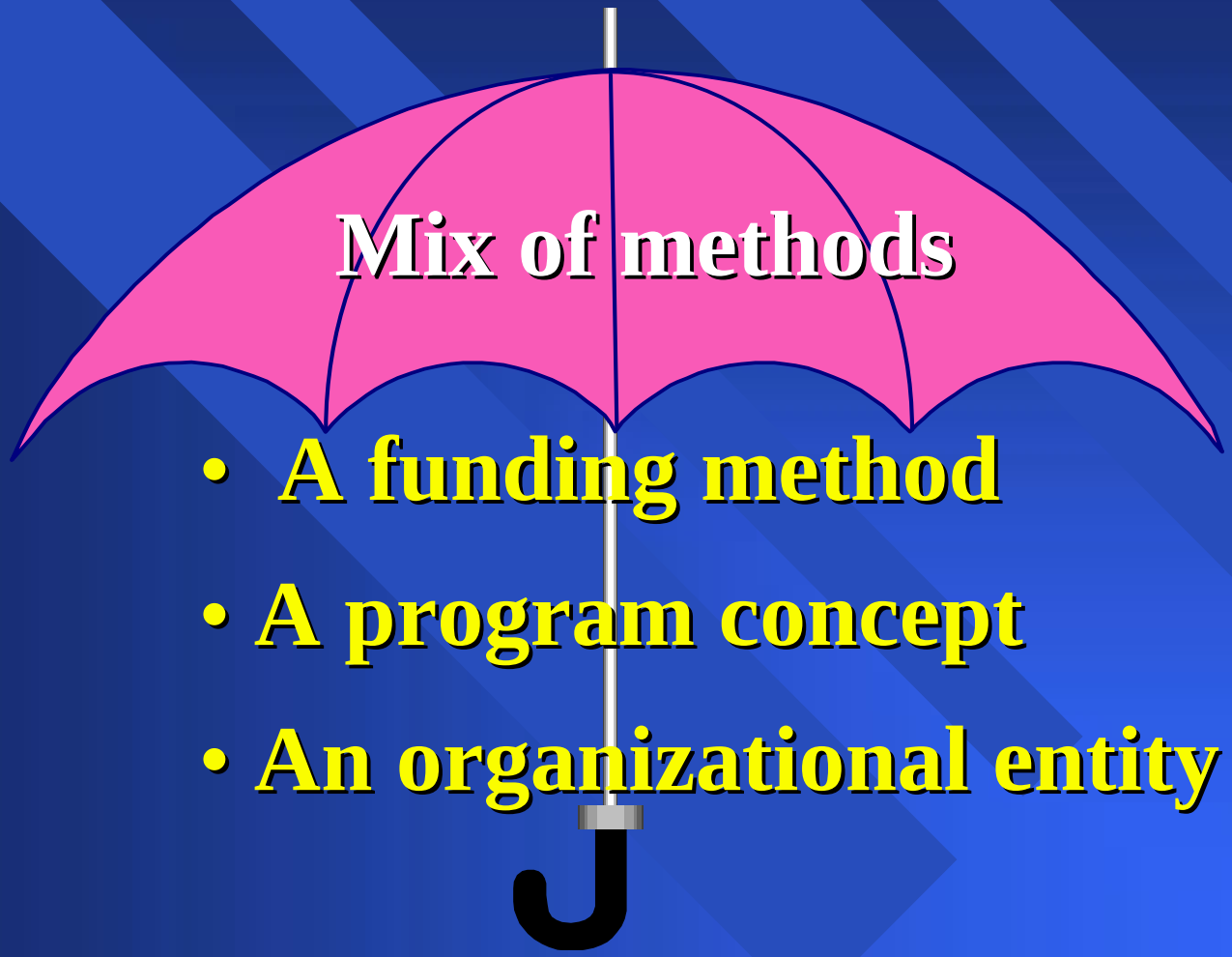
4. What are the top compelling reasons in your community to set up a stormwater utility (pick your top reason)?
   a) Flooding problems
   b) Aging infrastructure
   c) Development pressures
   d) Erosion of channels & creeks
   e) Water quality & ecology
   f) Regulatory mandates

Question and Answer Break

Stormwater Utilities

What makes it “better”?

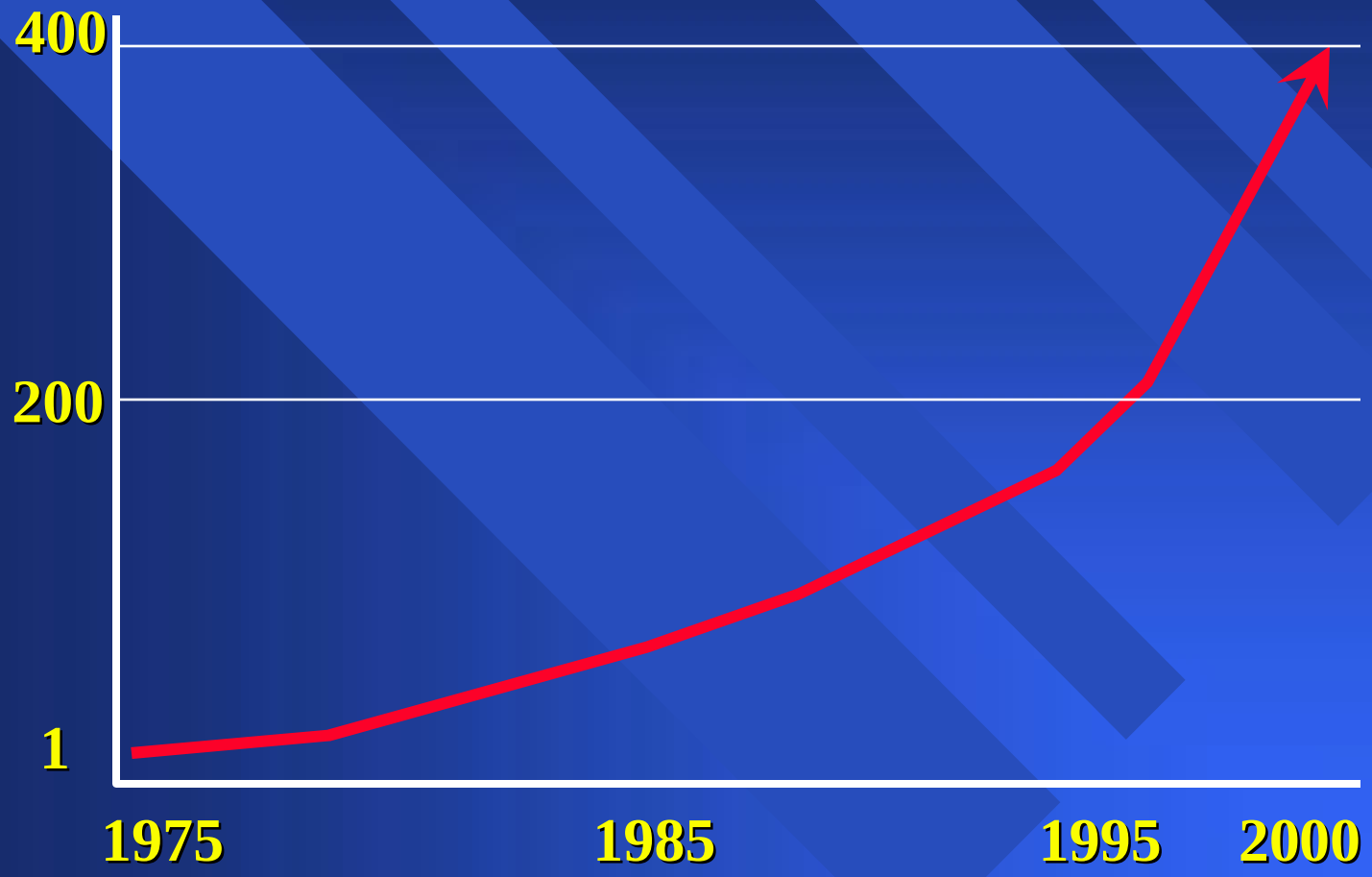
What is a Stormwater Utility?



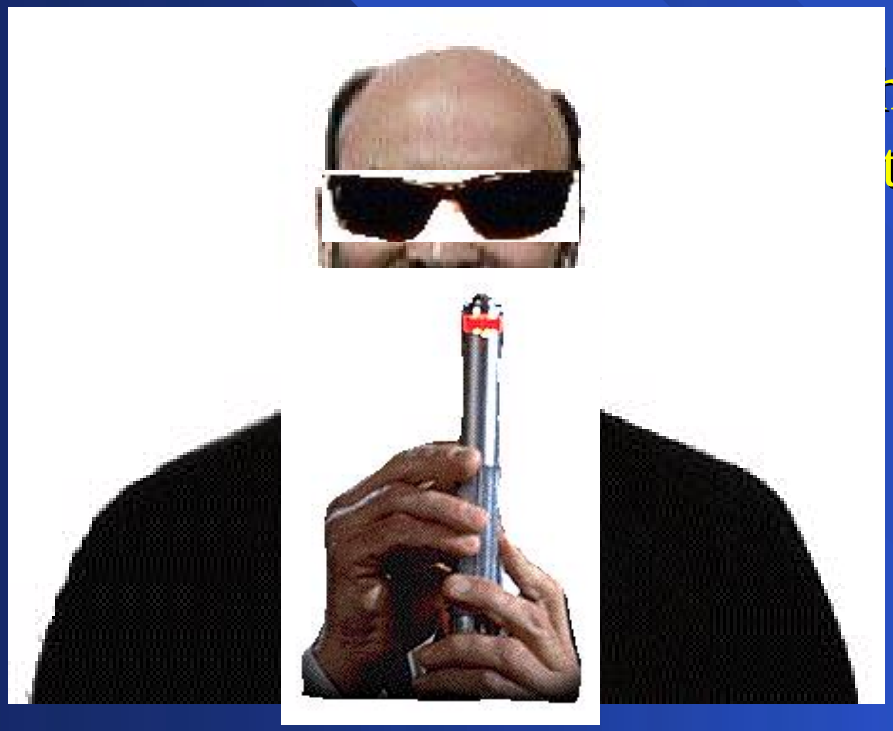
Mix of methods

- **A funding method**
- **A program concept**
- **An organizational entity**

Growth of Utilities



Advantages of a Stormwater Utility to Support Programs



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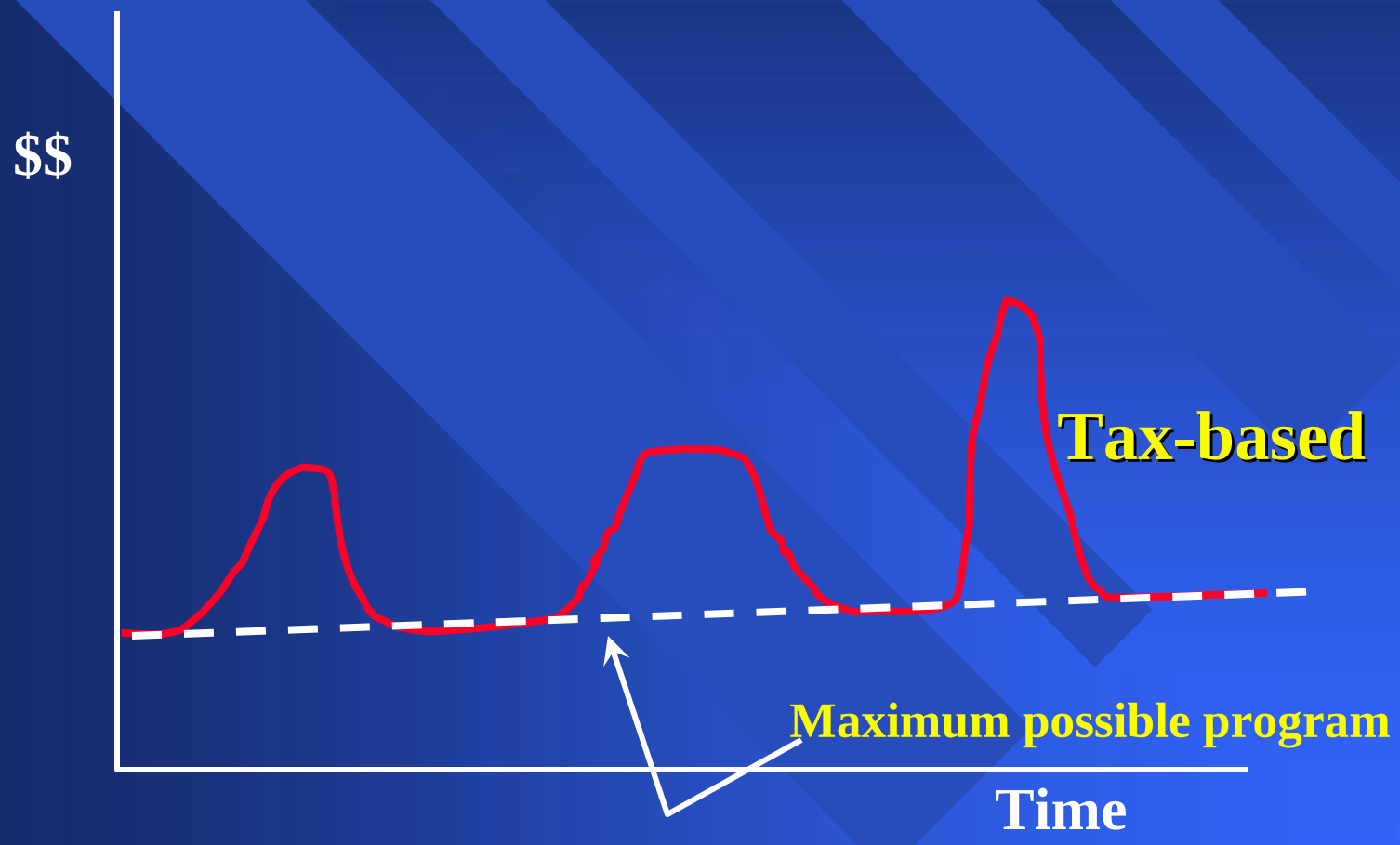
taxes”

- Stable
- Adequate
- Flexible
- Equitable

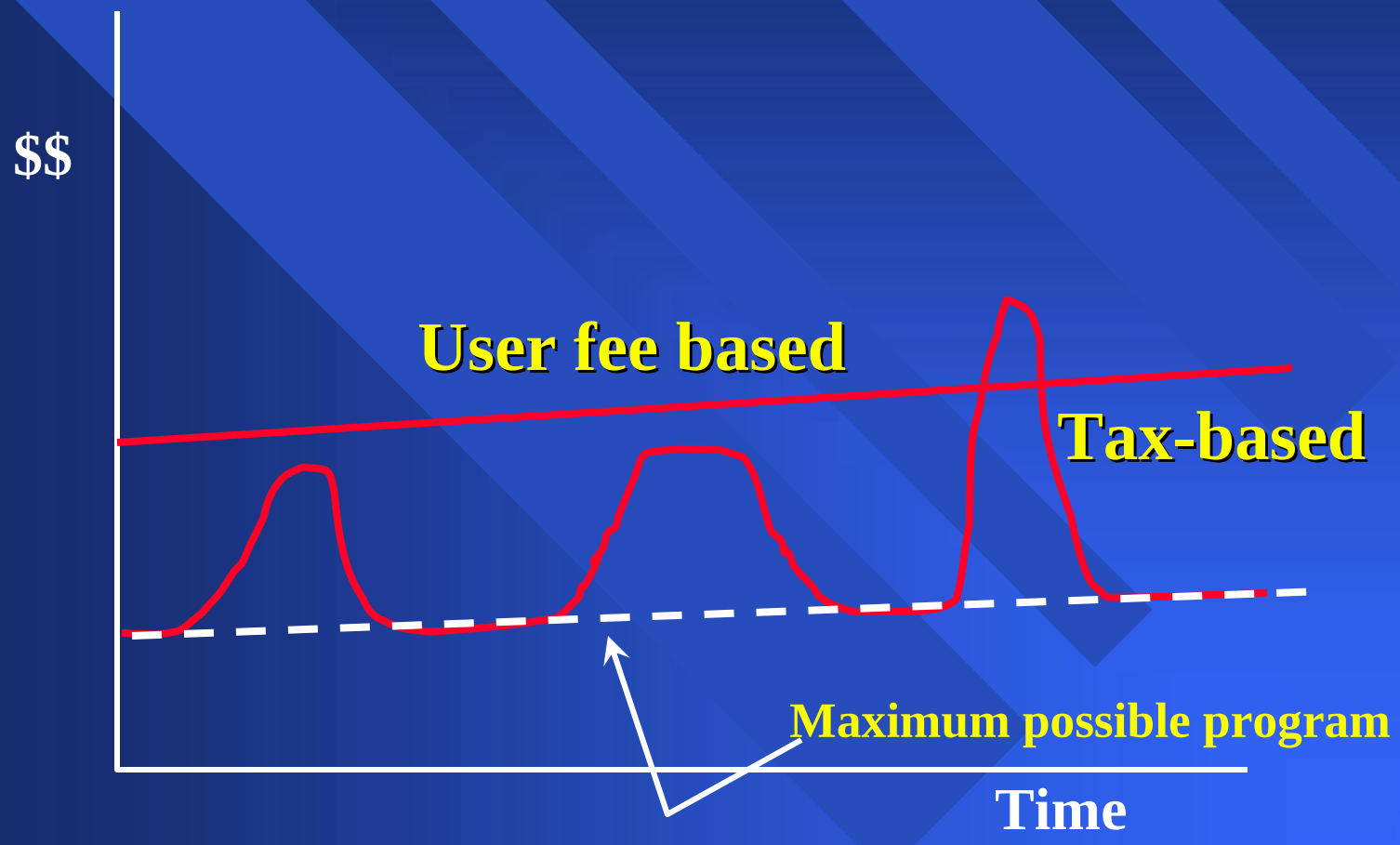
Stable

Utility vs. Tax Funding

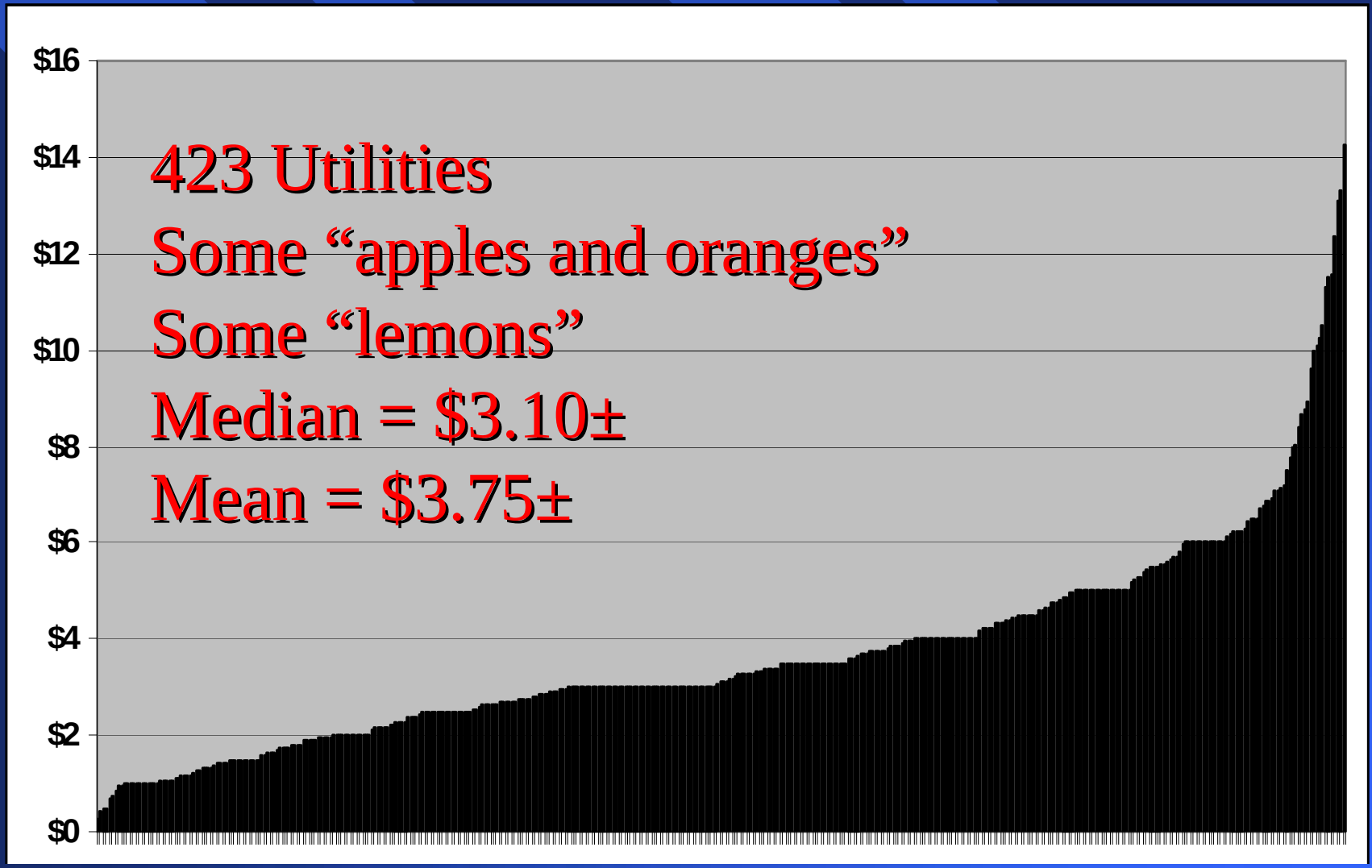


Stable

Utility vs. Tax Funding

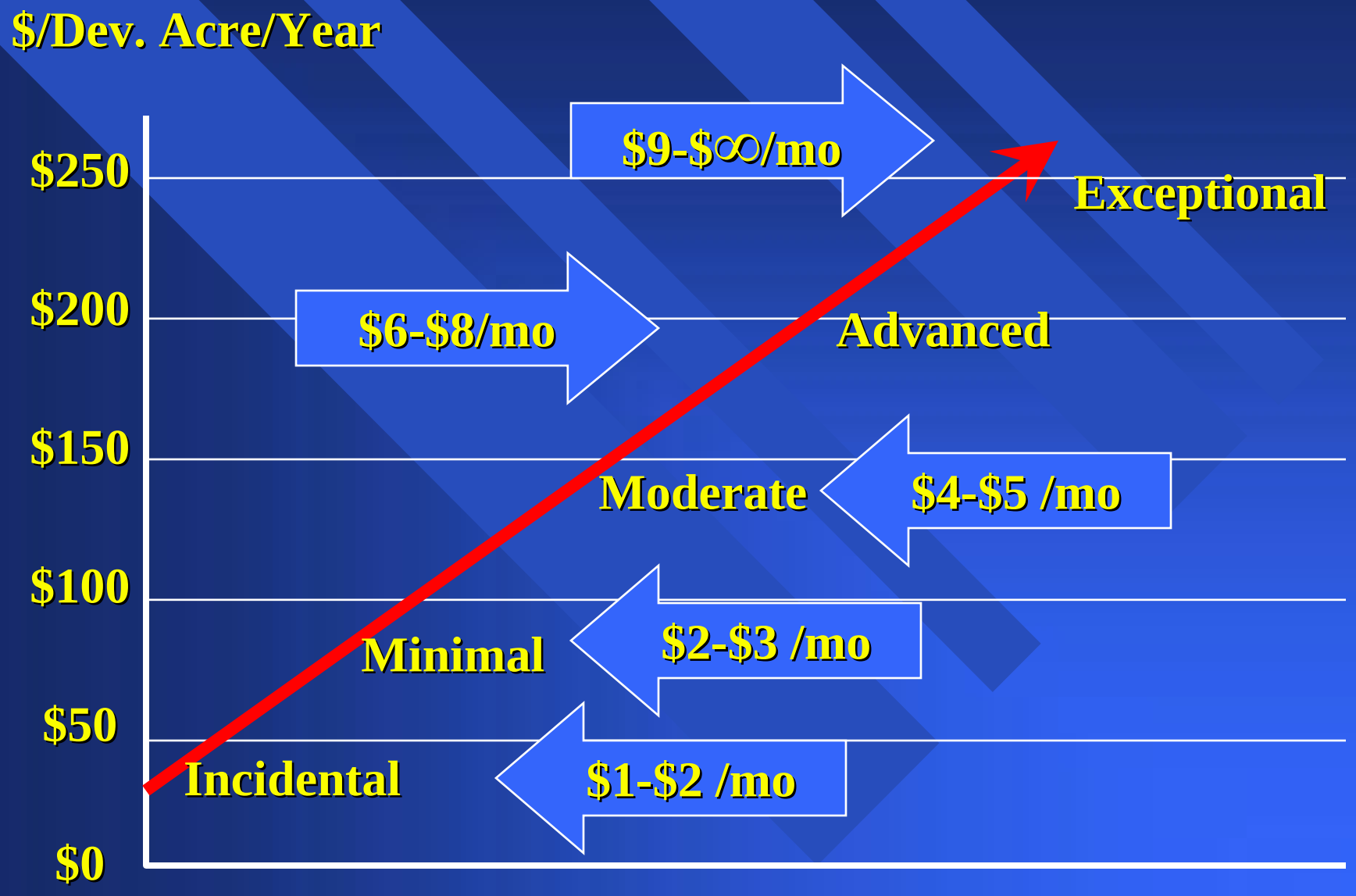


Adequate


$16
$14
$12
$10
$8
$6
$4
$2
$0
423 Utilities
Some “apples and oranges”
Some “lemons”
Median = $3.10±
Mean = $3.75±

Typical Stormwater Program Costs

Typical Stormwater Program Costs



Polling Questions

5. How would you characterize your stormwater program?

   A) Incidental

   B) Minimal

   C) Moderate

   D) Advanced

   E) Exceptional

Polling Questions

6. About how much does your municipality spend on stormwater per year per person?

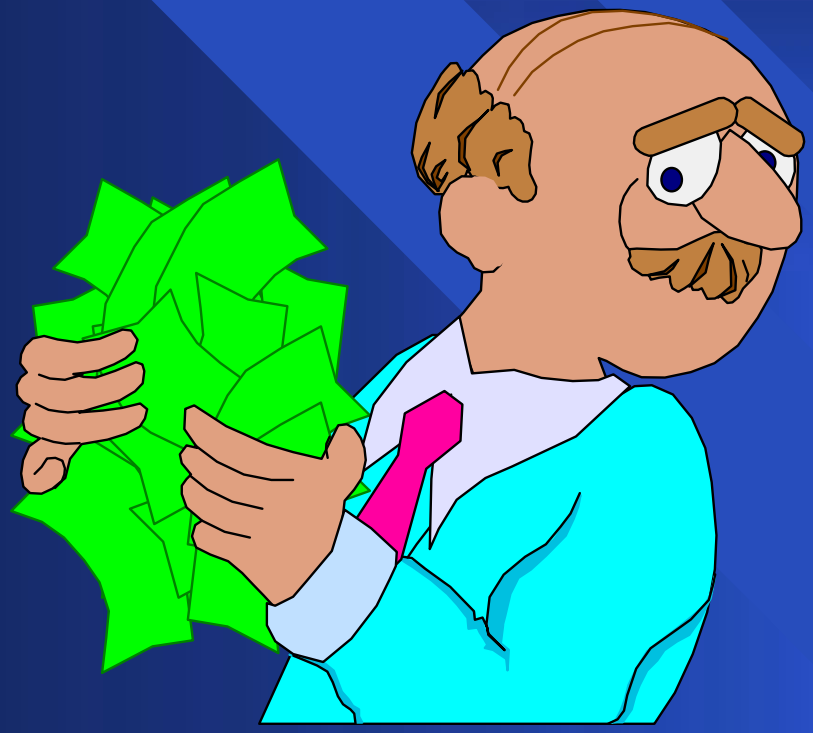
   A) < $1.00

   B) $1.00 to $2.00

   C) $2.00 to $4.00

   D) > $4.00

Flexible

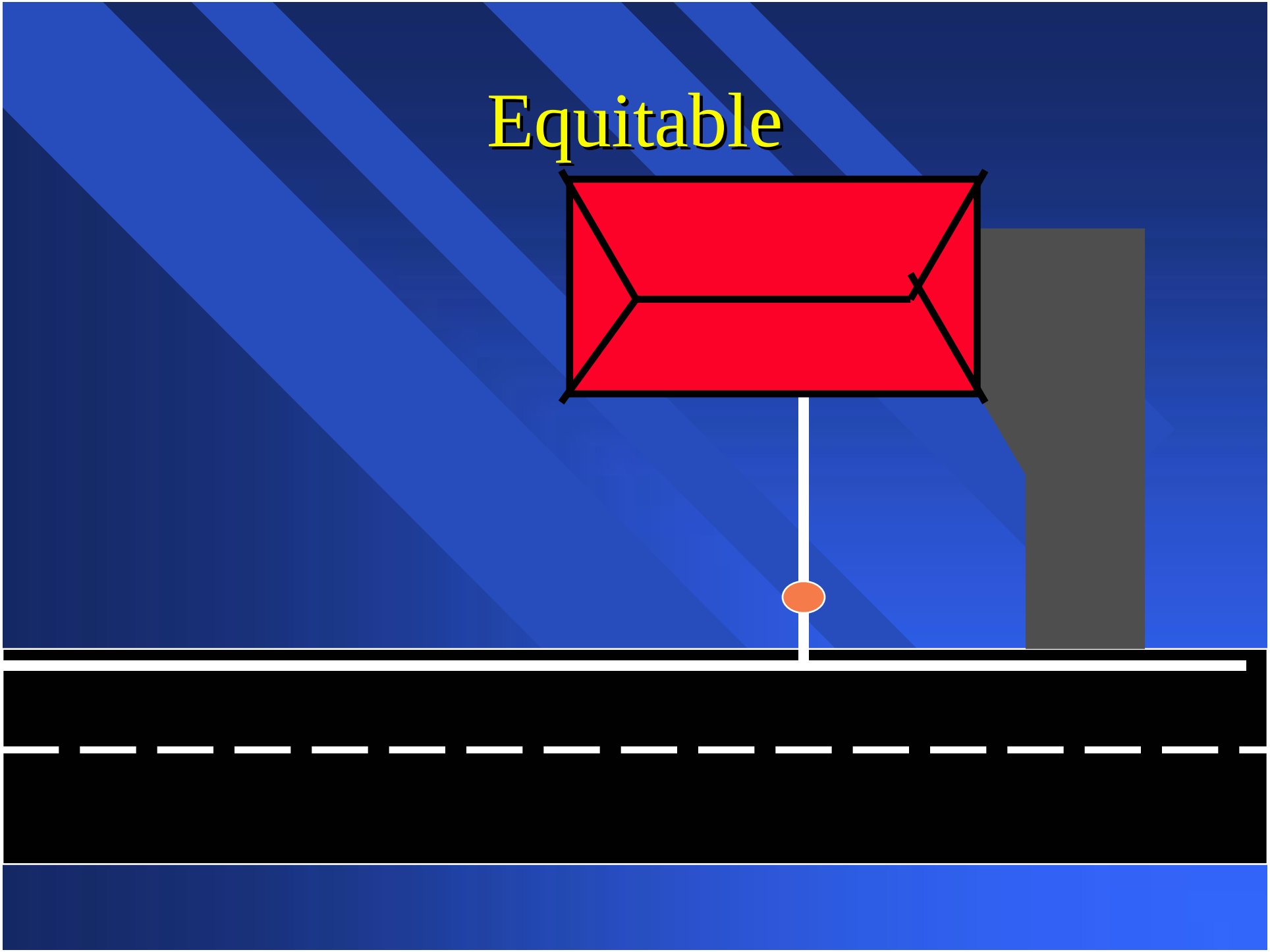


- Primary source for the <u>whole</u> program
- Other fees to enhance equity
- Credits to encourage good performance

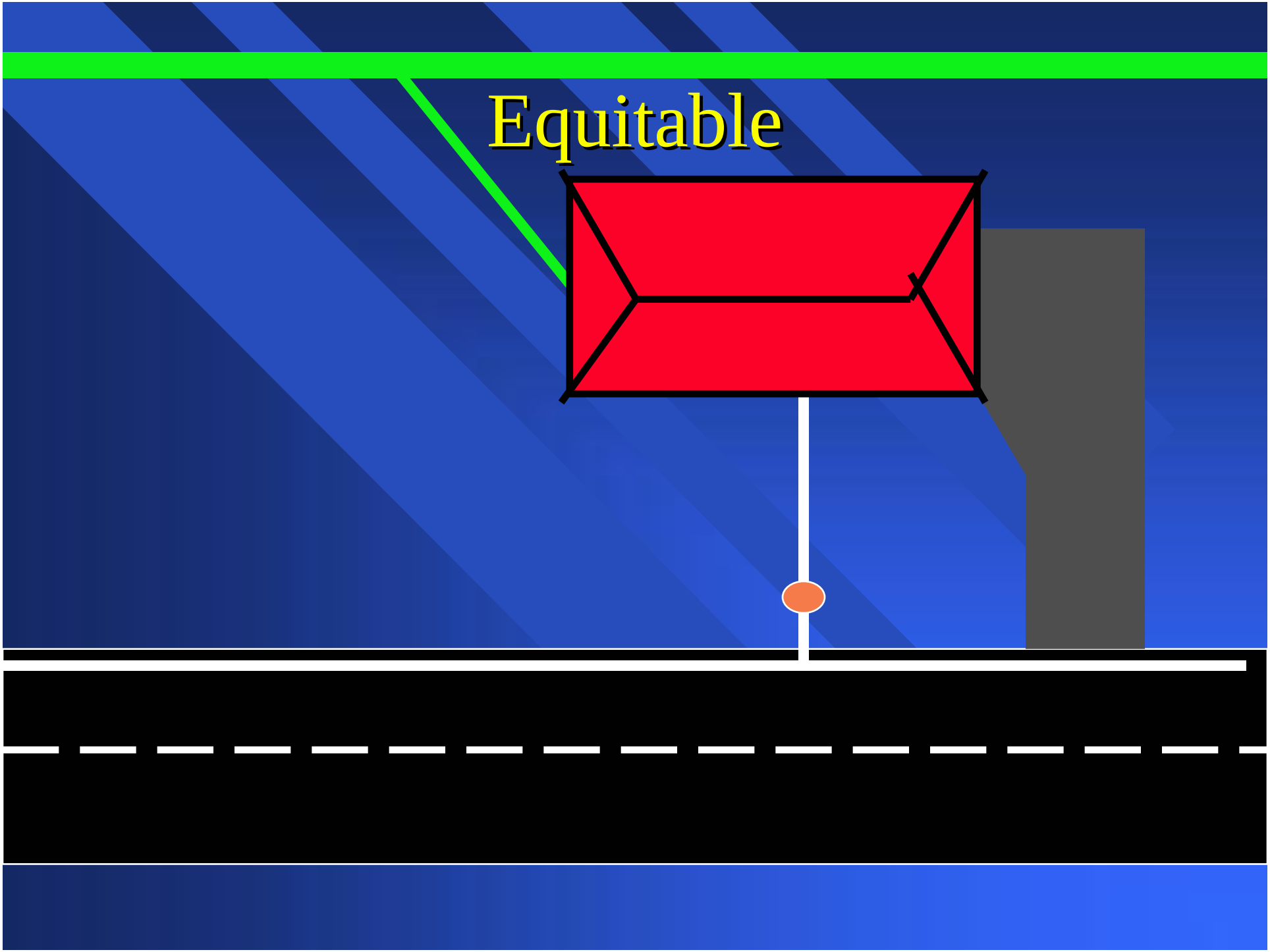
Flexible

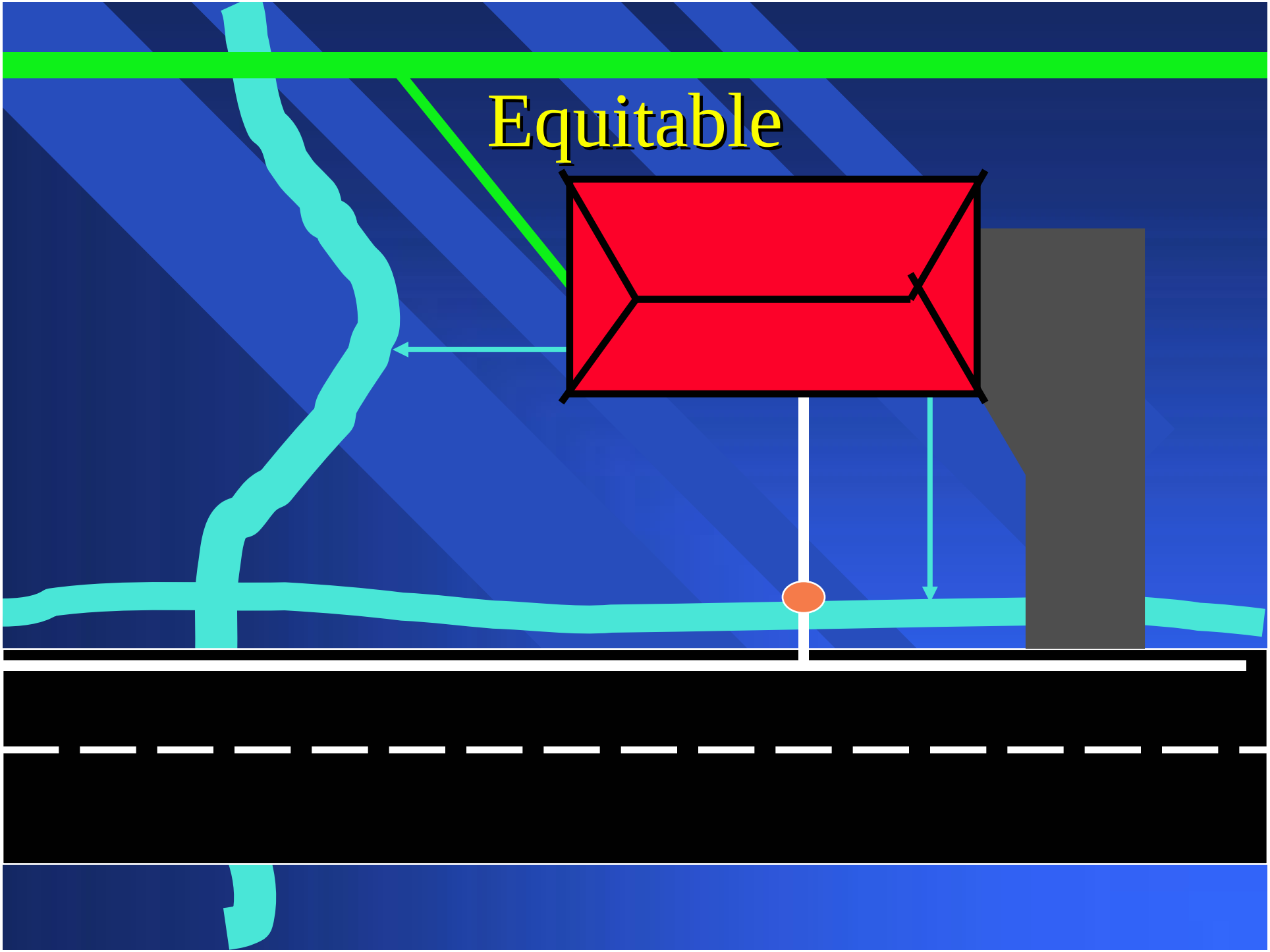
- Primary source for the <u>whole</u> program
- Other fees to enhance equity
- Credits to encourage good performance
- Can be geographically based
- Can take into account environmental costs

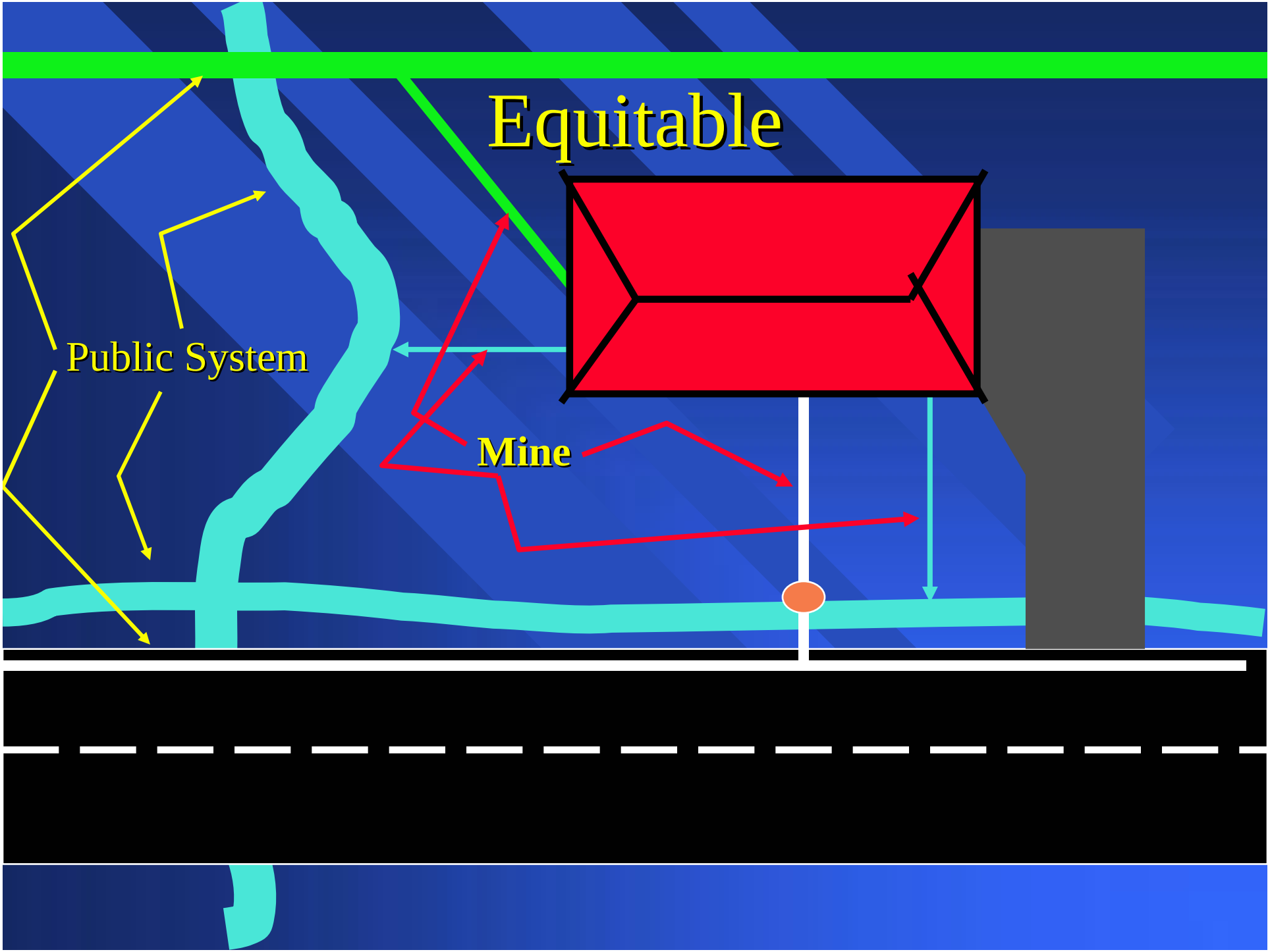
Equitable



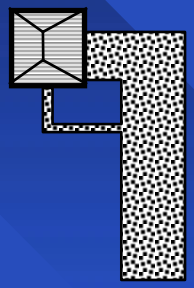
Equitable



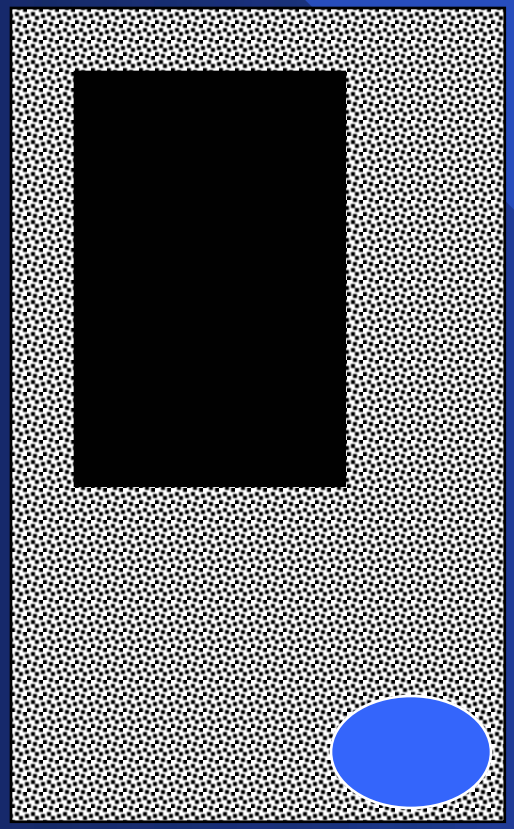

Equitable


Equitable
Public System
Mine

Equitable: How a Fee is Calculated



= 1 ERU



= 40 ERUs less credit

Law Suits

Who will come after you, and how?

Who will not like the concept?

Who will not like the concept?

- **tax exempt properties**
- **people with large paved areas with cheap buildings**
- **fixed income**
- **sometimes developers don't like it**
- **Maybe everybody !!**

Categories of Municipal Revenue

- ✓ Taxes
  - Primary revenue generator
  - No mandatory association with specific activities

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  - Often one time capital construction

Categories of Municipal Revenue

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  - e.g. Franchise fee
- ✓ Assessments
  - Direct and special benefit
  - Often one time capital construction
- ✓ Service Charge
  - Tied to objective or program
  - Fee level based on provision of goods & services
  - Partially voluntary

Every state is different

Supreme Court Challenges

- Montana – 1966
- Colorado – 1986 & 1993
- Kentucky – 1989 & 1996
- Ohio – 1990
- Oregon – 1992 & 1993
- Kansas – 1994
- Florida – 1995, 1998 & 2003
- Washington – 1997
- Virginia – 1998
- Tennessee – 1998
- Michigan – 1998 & 2001
- North Carolina – 1998 & 1999
- South Carolina – 1999
- Alabama – 2001
- California – 2002
- Georgia – 2004
- Illinois – 2005

Seven different types of challenge to plan for

Polling Questions

7. Does your municipality have a stormwater utility?

   A) Yes

   B) No

   C) Seriously considering

   D) In progress

Question and Answer Break

Implementation of a Stormwater Utility

How is a utility set up?

There is nothing more difficult and dangerous, or more doubtful of success, than an attempt to introduce a new order of things in any state.

For the innovator has for enemies all those who derived advantages from the old order of things, while those who expect to be benefited by the new institutions will be but lukewarm defenders.

Niccolo Machiavelli

Bringing About Change

Change = D • V • P

Bringing About Change

Change = D • V • P

- D = Dissatisfaction (or desperation) with the status quo
- V = an attractive Vision for the future, a model of the way it can be
- P = a logical step-by-step Plan of action to bring about the change

The power of multiplication !!

A question of “due diligence”

Establishing a successful stormwater utility requires that you pay attention to five key areas of due diligence:

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1. Governance and inter-municipal consensus

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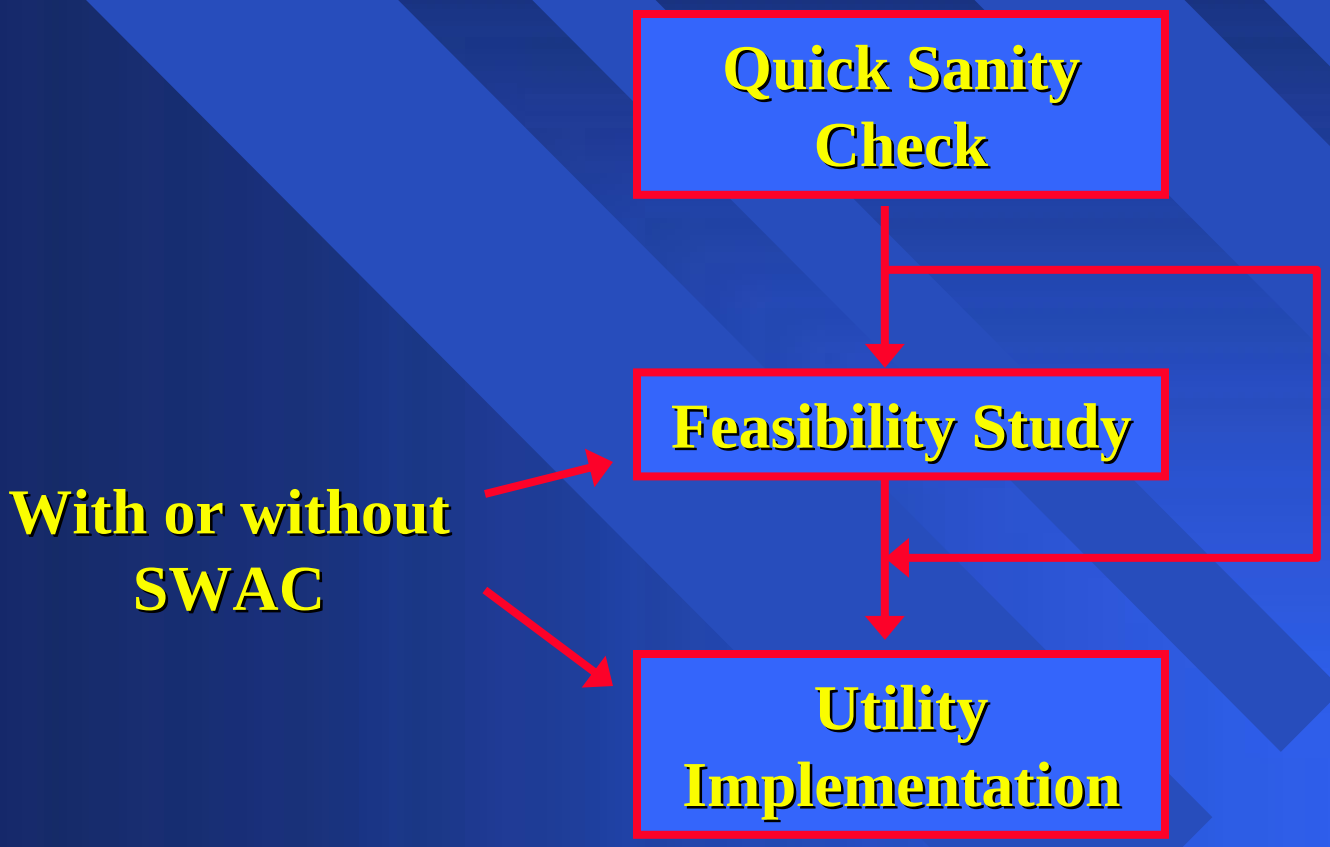
1. Governance and inter-municipal consensus
2. Program concept and the compelling case
3. Public and political education and support
4. Financial policies and documents
5. Database development & accuracy and customer service

2 or 3 Step Process



Advisability Study

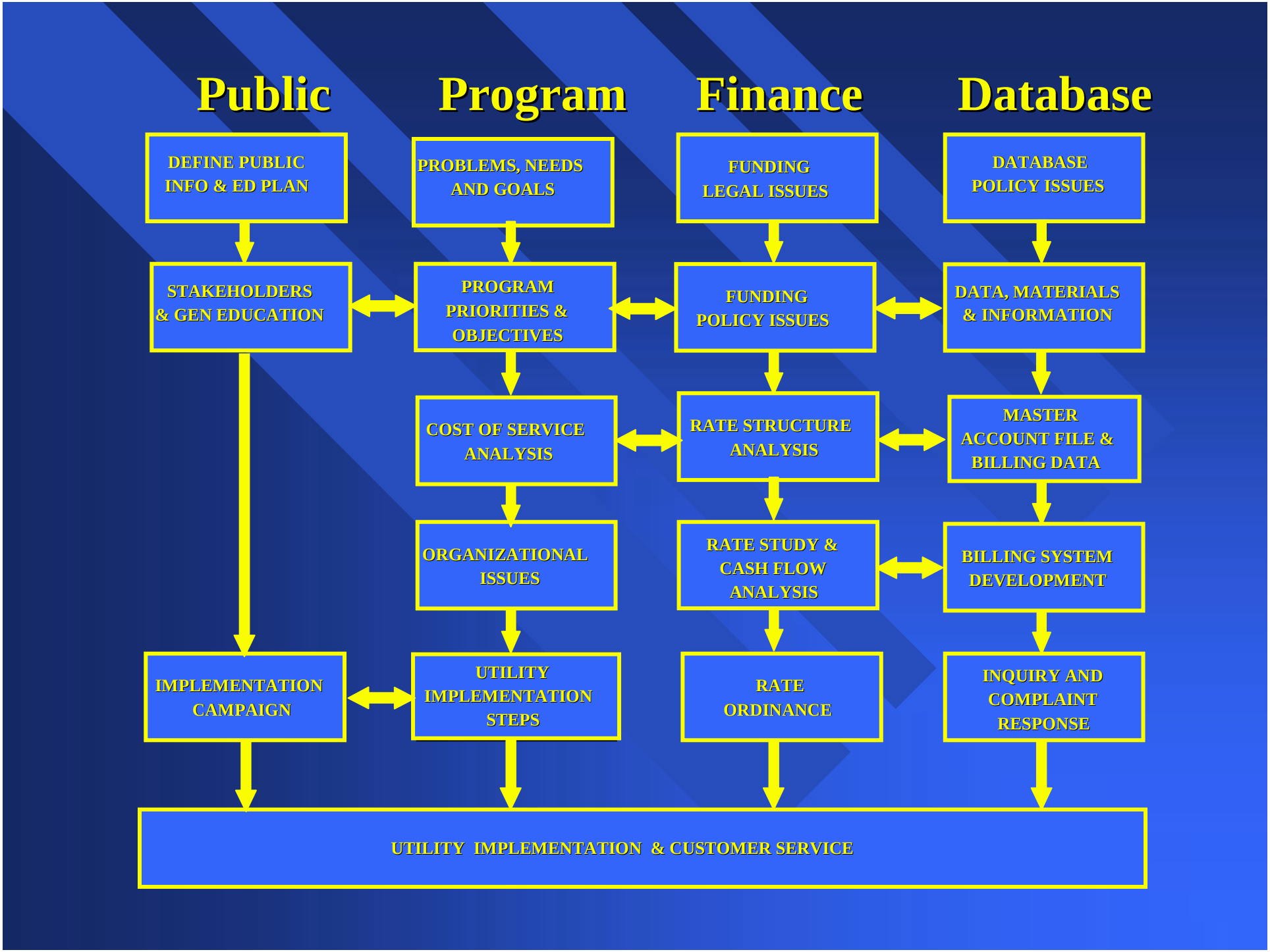
DIMS (does it make sense…at all)

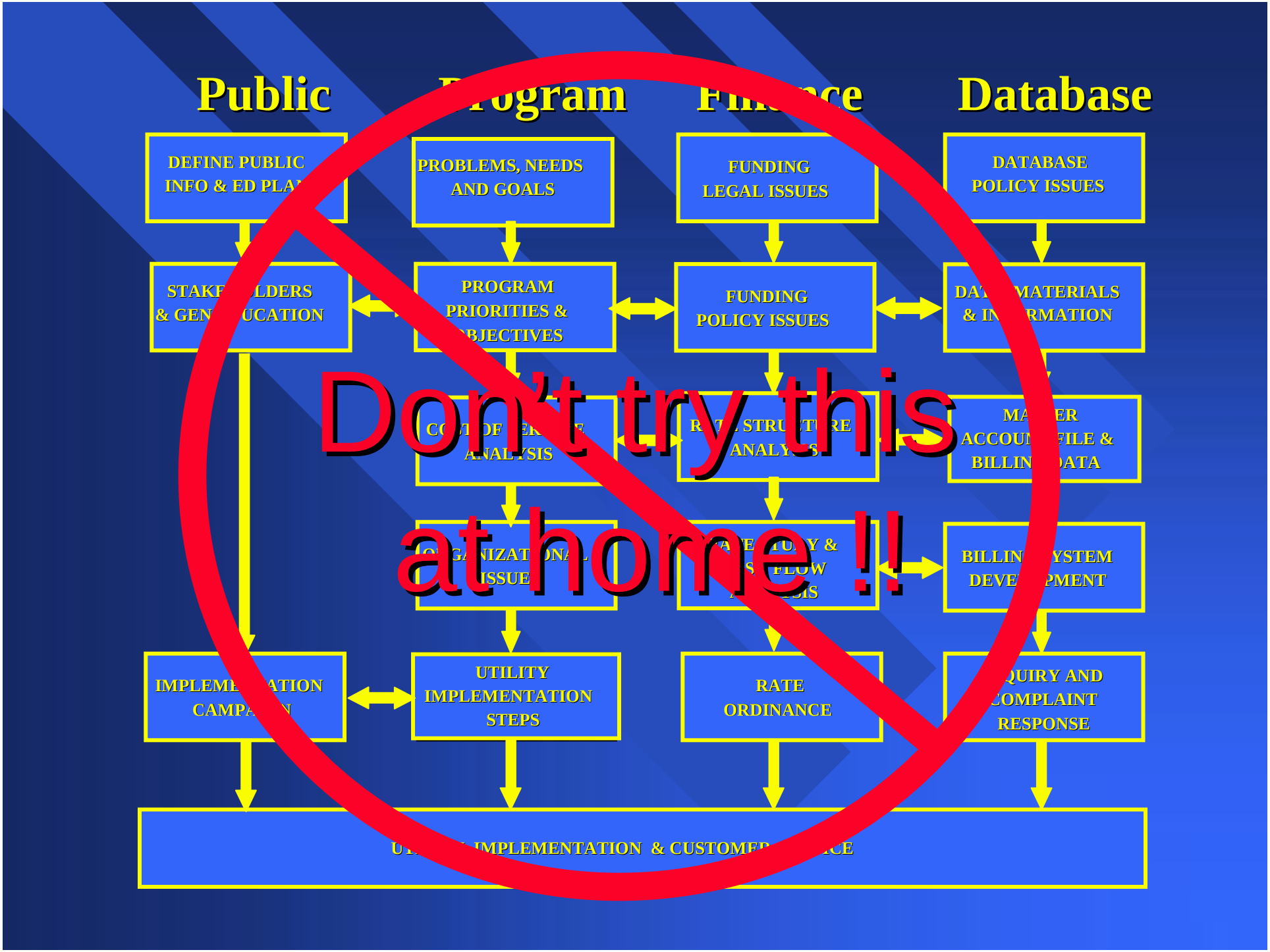
A DIMS study takes quick and dirty look at whether it is advisable to begin the process of stormwater utility development and outlines a general roadmap, costs, and approach.

It answers the question, “does this make sense at all?”

Feasibility Study

- What are we spending and doing now in stormwater?
- What are the significant problems, issues and needs we face?
- How have others solved them?
- How should we solve them?
- What will it cost?
- How should we pay for it?


Public
Program
Finance
Database
DEFINE PUBLIC INFO & ED PLAN
PROBLEMS, NEEDS AND GOALS
FUNDING LEGAL ISSUES
DATABASE POLICY ISSUES
STAKEHOLDERS & GEN EDUCATION
PROGRAM PRIORITIES & OBJECTIVES
FUNDING POLICY ISSUES
DATA, MATERIALS & INFORMATION
COST OF SERVICE ANALYSIS
RATE STRUCTURE ANALYSIS
MASTER ACCOUNT FILE & BILLING DATA
ORGANIZATIONAL ISSUES
RATE STUDY & CASH FLOW ANALYSIS
BILLING SYSTEM DEVELOPMENT
IMPLEMENTATION CAMPAIGN
UTILITY IMPLEMENTATION STEPS
RATE ORDINANCE
INQUIRY AND COMPLAINT RESPONSE
UTILITY IMPLEMENTATION & CUSTOMER SERVICE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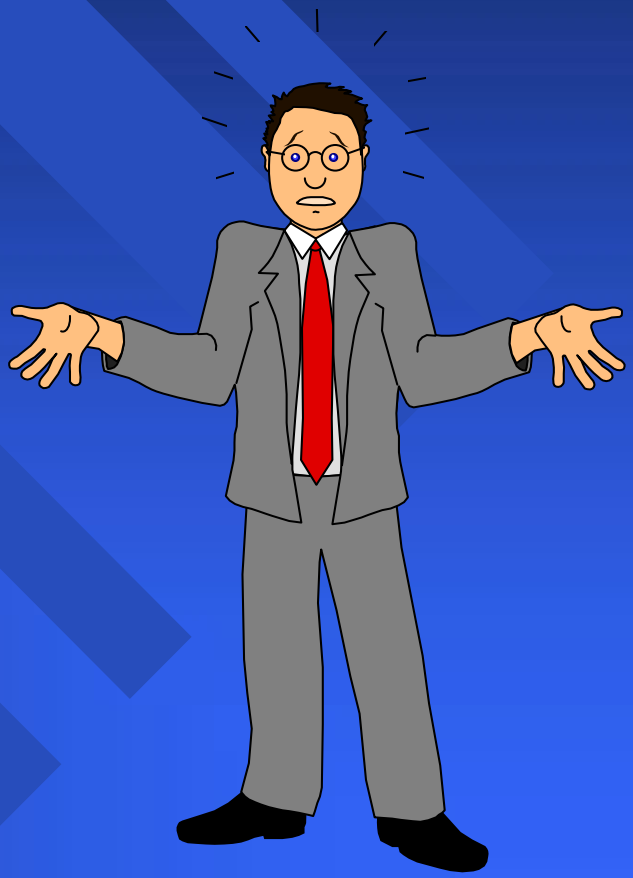
UTILITY IMPLEMENTATION & CUSTOMER SERVICE
Don't try this at home !!

How to fail flawlessly…

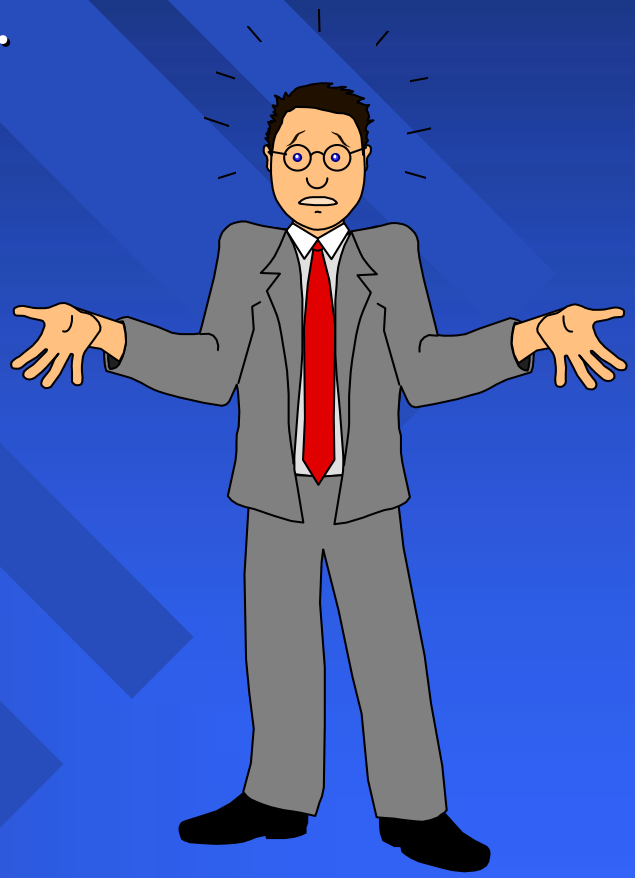
How is a stormwater utility <u>not</u> set up?

Really, it would have worked, but ……..



Really, it would have worked, but ……..

- We didn’t understand the process.



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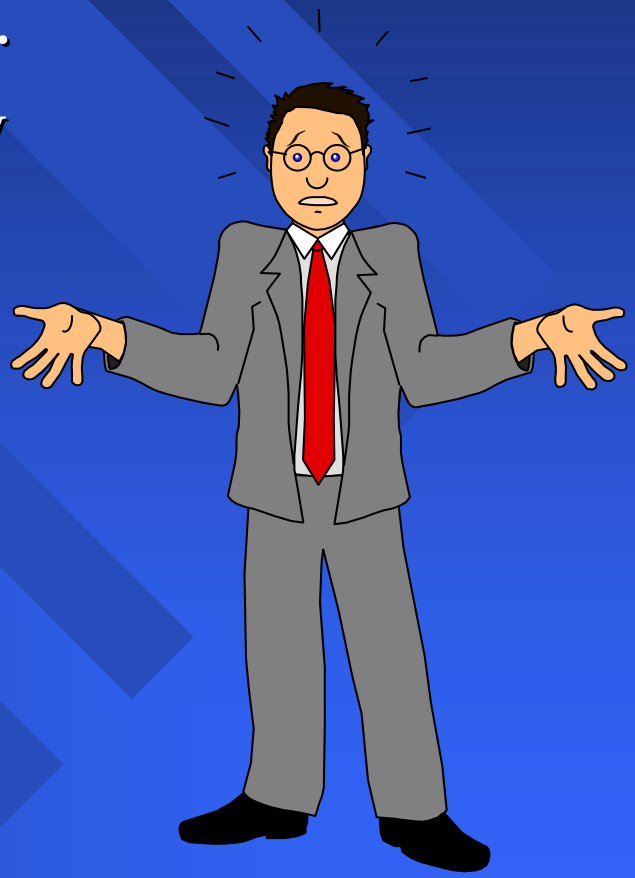
- We didn’t understand the process.
- We didn’t involve the community early enough or in the right ways.



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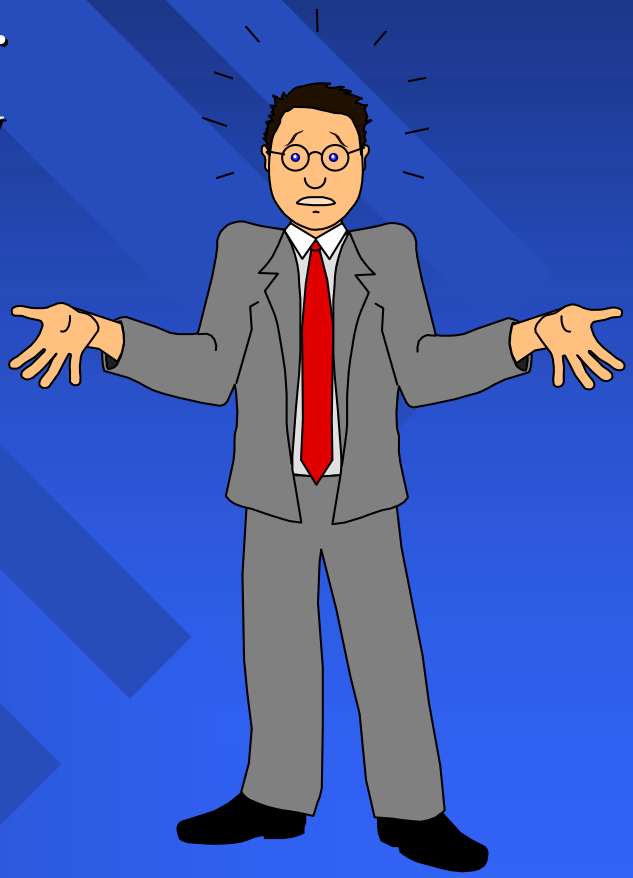
- We didn’t understand the process.
- We didn’t involve the community early enough or in the right ways.
- We couldn’t explain our program and funding strategy or rates.



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- We didn’t understand the process.
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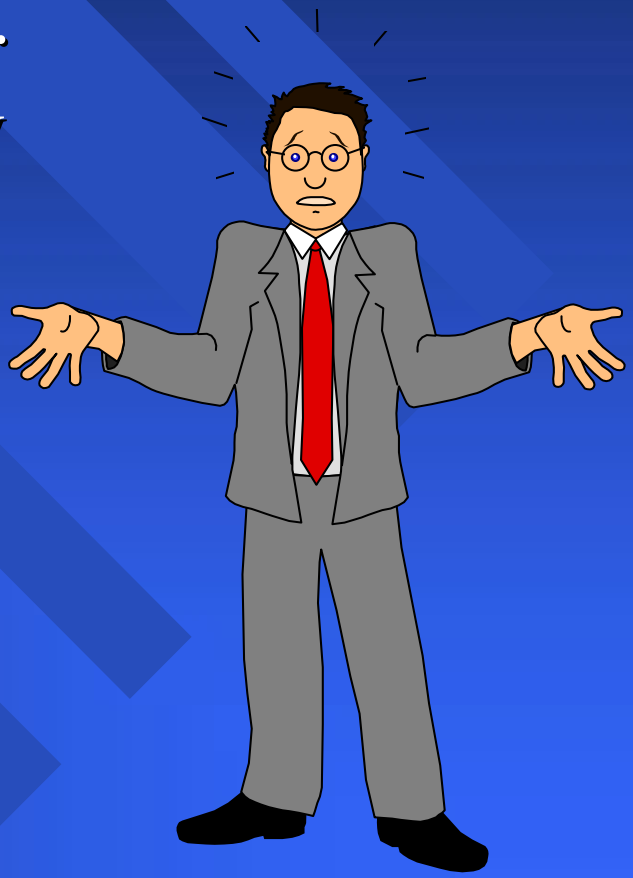
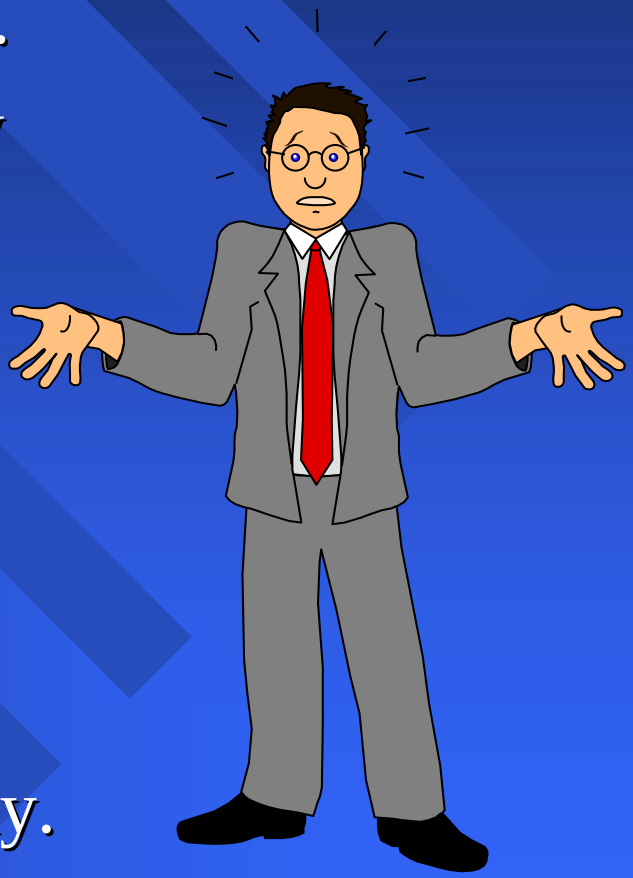


Really, it would have worked, but ……..

- We didn’t understand the process.
- We didn’t involve the community early enough or in the right ways.
- We couldn’t explain our program and funding strategy or rates.
- We didn’t prepare our elected officials for vocal complaints.
- We did it the convenient and inexpensive way, not the right way.



Question and Answer Break