Tonto Hills Improvement Association
Town Hall Meeting

Water Committee Report
Monday, February 25th 2008

Agenda

6:30 PM Introductions & Opening Comments

6:45 PM CAP Presentation

7:15 PM Water Committee Overview

7:45 PM PER Summary of Results

8:45 PM Utility Financial Analysis Summary

9:15 PM DWID Process

9:30 PM Conclusions, Next Steps and Open Forum

Introductions & Opening Comments

Rick Nelson

Background

- **Tonto Hills Utility Company (THUC) is for sale**
  - ✓ **Tonto Hills community has First Option to Purchase**
  - ✓ **Option expires July 1, 2008**
- **2006 THIA Board formed Water Committee to evaluate options & obtain facts (Due Diligence)**
- **September 2006 & 2007 Town Hall identified 3 options:**
  - ✓ **No Action**
  - ✓ **Form Domestic Water Improvement District (DWID) to purchase THUC**
  - ✓ **Investigate City of Scottsdale Annexation**

Why Is This Effort Important?

- **Water is a Priceless Commodity when we Don't Have It**
- **Without secure water supply, community Viability and Growth is in Doubt**
- **Local Control of Water Utility is the Issue**
  - ✓ **Central Arizona Project (CAP) allocation is owned by utility**
  - ✓ **CAP allocation could be moved by an owner for other uses**
  - ✓ **Value of CAP allocation as commodity may exceed value as THIA water supply**

What Is The “No Action” Option & Impact?

- **If Community Decides to Take No Action**
  - ✓ **Current Owner Will Continue to Operate Utility Until Sale**
    - ➢ **Water Rates Controlled By ACC (Rate increases possible)**
  - ✓ **Future Owner Must Operate and Supply Community with Water (Certificate of Convenience and Necessity)**
    - ➢ **CAP Allocation Could be Sold**
    - ➢ **Replacement Water Source & Quantity Not Specified**
    - ➢ **Delivery Source Not Specified**
    - ➢ **Water Rates Controlled By ACC (Rate increases possible)**

Annexation into Scottsdale May Be Part of the Longer Term Solution

- **Water Committee gathered preliminary data**
- **City of Scottsdale presented annexation information at Town Hall**
- **Community held poll to achieve 25% interest required for Scottsdale to commit resources to further investigation**
- **Awaiting Scottsdale response to THIA request for further investigation of annexation**
- **Annexation will take years to complete, so not part of immediate solution to control water supply before July 2008**

Who Are the Players?

- **Arizona Corporation Commission (ACC)**
  - ✓ **Has jurisdiction over all private water companies, who must abide by Title 14, Article 4 of Arizona Administrative Code**
  - ✓ **Sets utility rates**
  - ✓ **Arbitrates complaints**

- **Arizona Department of Water Resources (ADWR)**
  - ✓ **ADWR regulates water supplies for Arizona communities**
    - ➢ **Administers and enforces Arizona groundwater code, and surface water rights laws**
    - ➢ **Negotiates to protect Arizona's Colorado River water supply**
    - ➢ **Oversees the use of surface and groundwater**

- **Central Arizona Project (CAP)**
  - ✓ **CAP is steward of Arizona's Colorado River Water Entitlement**

CAP Presentation

Ms. Susan Bitter Smith
CAP Board President

Water Committee Overview

Bill Victor

THIA Water Committee

Bill Victor, Chair - Water Resources Consultant for 29 years
Resident for 15 years

Chris Chartier - Mechanical Engineer – Resident for 5 years

Tom Bailey – Engineering Technician – Resident for 12 years

Robert Kroger – THVFD Chief & Municipal Bond Trader
Resident for 3 years

Don Rex – Aerospace Engineer – Resident for 18 years

Rick Pearson – Petroleum Engineer – Resident for 2 years

Bob Swan - CPA and CFO – Resident for 4 years

Water Committee Presentation

- **Present information on:**
  - ✓**CAP reliability in time of drought**
  - ✓**Engineering evaluation of water system**
  - ✓**Financial due diligence**
  - ✓**Steps to form a DWID**
- **Hold Questions Until End of Presentation**
  - ✓**Submit Written Questions**
  - ✓**Answer Questions at Close of Meeting or next Session**

THIA Water Committee Tasks & Activities

PRIMARY GOAL: To gather information and conduct due diligence for water system alternatives

3 ALTERNATIVES:
1. No Action
2. Domestic Water Improvement District (DWID)
3. Annexation by Scottsdale

INVESTIGATIONS:
- Meetings with WIFA
- Meetings with Rural Development agencies
- Meetings with City of Scottsdale
- Interviews of ACC, ADWR & Maricopa County
- Interviews of prominent water attorneys
- Review of various reports and regulations
- Engineering review of water system
- Due diligence of THUC finances and contracts

THIA Water Committee Tasks & Activities

PER: Preliminary Engineering Report (PER) needed to be eligible for low cost loans to form DWID and buy water company

WIFA GRANT: $10,000 grant
$10,000 matching funds from THIA

PER Contractor: Arizona Engineering Company (Karl Tobin)

TOWN HALLS:
1. Summary of preliminary investigations
2. Scottsdale Town Planner – Don Hadder
3. PER presentation

CAP Drought Impact Analysis

- **CAP, assisted by ADWR, projected potential drought impacts**
  - ✓ ***CAP Drought Impact Analysis*** **(June 2007)**
- **Took various 18-year drought periods from last 100 years of recorded history and assumed our next 18 years are those years**
  - ✓ **Provides scenario similar to extended droughts evident in prehistoric tree ring records**
  - ✓ **Looked at “average”, “bad” and “worst” case scenarios**
  - ✓ **Even in worst case scenario, Tonto Hills CAP allotment is not impacted**

CAP Drought Impact Analysis

- **Analysis neglects conservation restrictions that will be taken if the potential for CAP shortages becomes more likely**
  - ✓ **Even minor conservation actions could provide significant reductions in projected shortages during droughts**
  - ✓ **All CAP users with the same priority share cut backs equally**

CAP Drought Impact Analysis

- **Priority of CAP water users, highest priority first:**

  1) **Municipal & Industrial (M&I; *includes Tonto Hills*) and Indian long-term contract entitlements**

  2) **Non-Indian Agricultural (NIA) long-term contract entitlements**

  3) **Agricultural Settlement Pool**

  4) **Full-cost Municipal & Industrial excess water**

  5) **Other recharge**

  6) **Arizona Water Banking Authority (AWBA) and Central Arizona Groundwater Replenishment District (CAGRD) replenishment reserves**

Figure 3

"Worst"

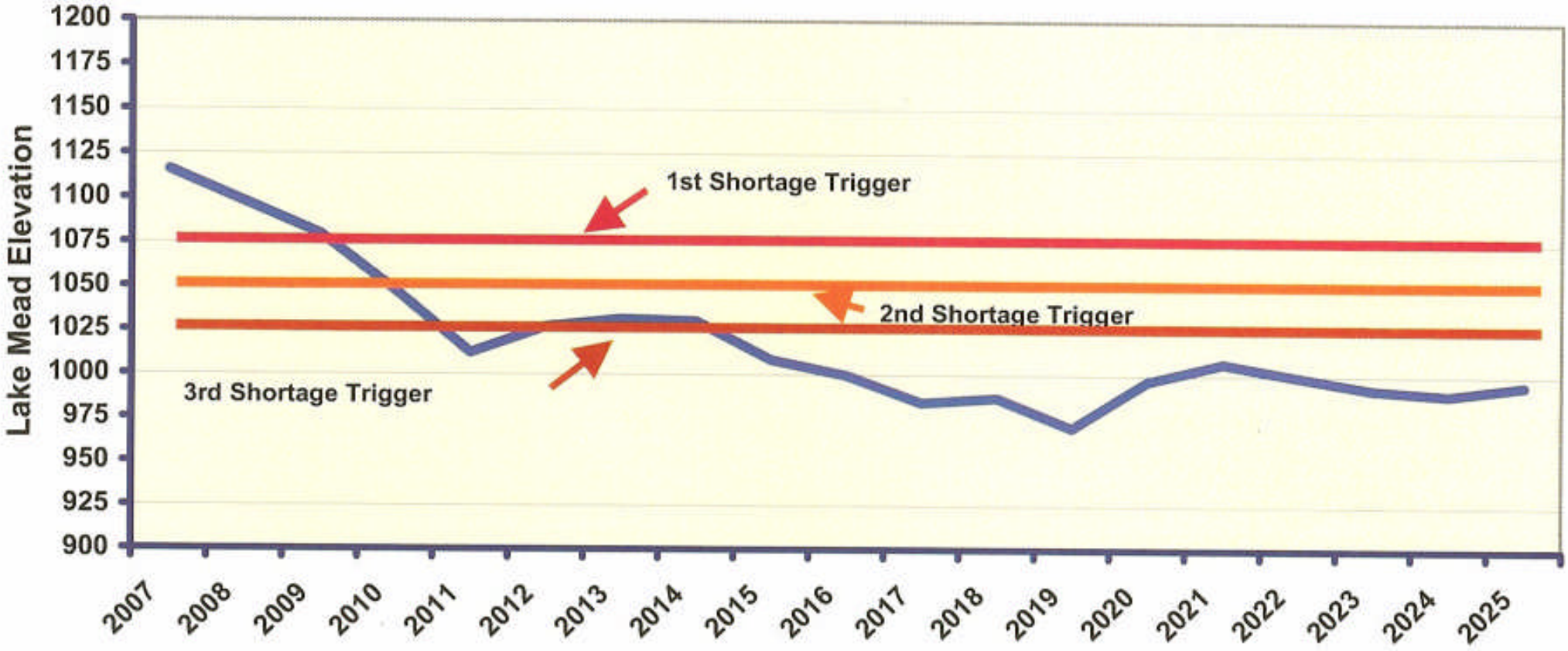
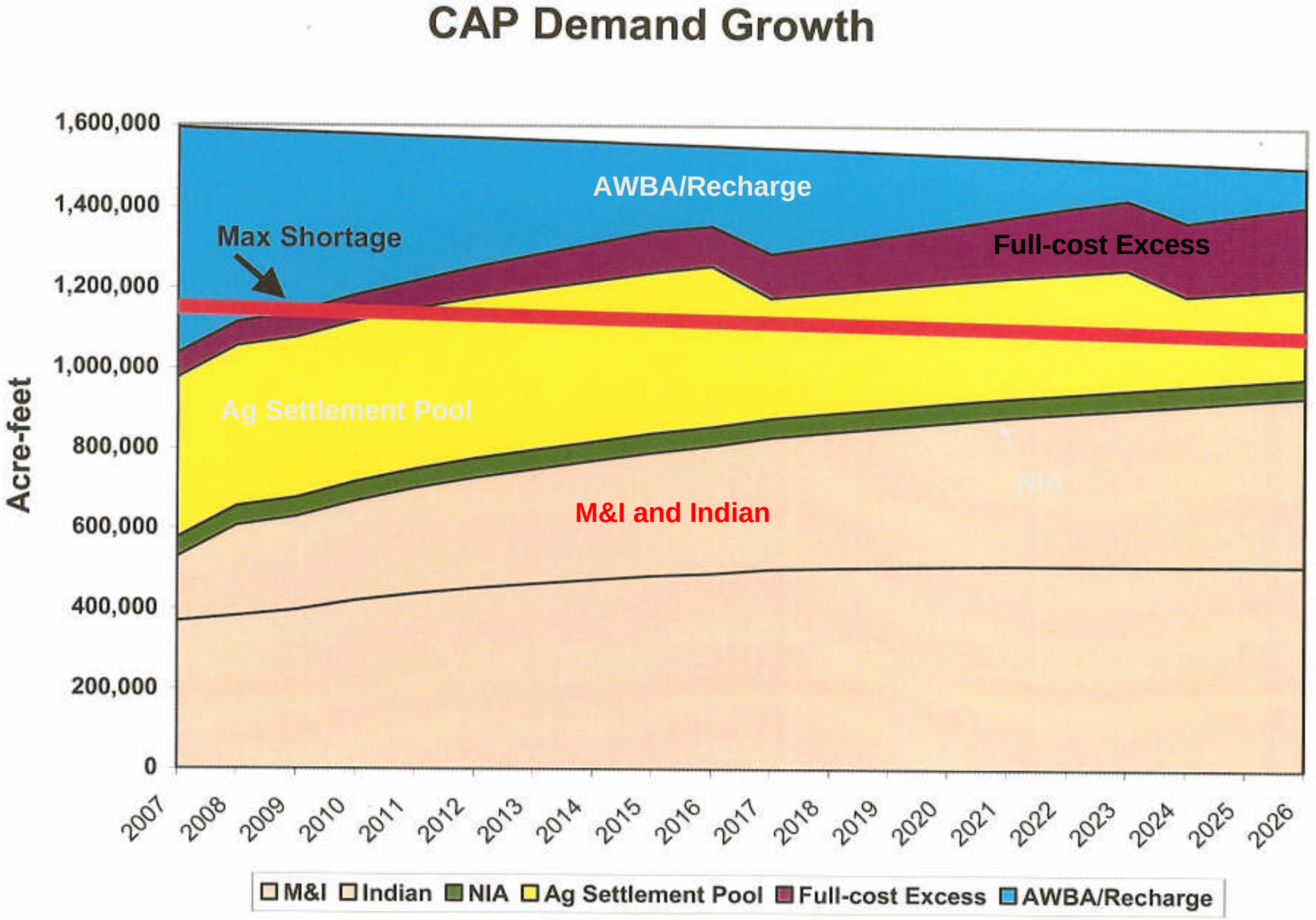


Table 4
Shortage by CAP Water Type -- "Worst" Scenario

	AWBA & Recharge	Full-Cost Excess Water	Ag Settlement Pool	NIA	M&I	Indian	Total CAP Shortage
2008	0	0	0		0	0	0
2009	0	0	0		0	0	0
2010	0	0	0		0	0	0
2011	356,000	4,000	0		0	0	360,000
2012	317,000	77,000	38,000	0	0	0	432,000
2013	283,000	77,000	0	0	0	0	360,000
2014	249,000	93,000	18,000	0	0	0	360,000
2015	215,000	101,000	44,000	0	0	0	360,000
2016	197,000	99,000	136,000	0	0	0	432,000
2017	260,000	109,000	63,000	0	0	0	432,000
2018	234,000	117,000	81,000	0	0	0	432,000
2019	205,000	128,000	99,000	0	0	0	432,000
2020	177,000	138,000	117,000	0	0	0	432,000
2021	148,000	150,000	134,000	0	0	0	432,000
2022	121,000	162,000	149,000	0	0	0	432,000
2023	95,000	172,000	165,000	0	0	0	432,000
2024	145,000	182,000	105,000	0	0	0	432,000
2025	120,000	192,000	120,000	0	0	0	432,000
2026	95,000	201,000	136,000	0	0	0	432,000

Figure 4


CAP Demand Growth
Acre-feet
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
AWBA/Recharge
Max Shortage
Full-cost Excess
Ag Settlement Pool
NIA
M&I and Indian
M&I
Indian
NIA
Ag Settlement Pool
Full-cost Excess
AWBA/Recharge

CAP Drought Impact Analysis

- **Paraphrased conclusions from the report:**

1) **Colorado River is highly variable system subject to dramatic change in runoff from year to year; it is impossible to predict the future hydrology of the river**

2) **“Could the ‘worst’ case scenario happen? Yes.**
   Is it likely? No.”

3) **Reasonable chance that CAP will experience some level of shortage during the next 18 years**

4) **Although the magnitude and duration of any shortage can not be predicted, the analysis suggests that CAP long-term contract holders, such as Tonto Hills Utility Company, are not likely to experience a reduction in supply**

PER Summary of Results

Karl Tobin, P.E.
Arizona Engineering Company

Prepared by:

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ARIZONA ENGINEERING COMPANY

Outline

- **Purpose**
- **Approach**
- **Inventory & Map**
- **Assessment**
- **Operations & Maintenances**
- **Improvement Recommendations**

Purpose

The customers of the Tonto Hills Utility Company are considering purchasing the water company.

The purpose of the Preliminary Engineering Report (PER) is to assess the system's current condition and provide minimum, likely, and worst case improvement recommendations.

Approach

- **Interview operation and maintenance staff**
- **Review available utility maps**
- **Field verification**
- **Waterline inspection**
- **Storage tank inspection**
- **Hydraulic Analysis**
- **Review Utility Company record data**

Tonto Hills Water System

Waterlines and Service Status

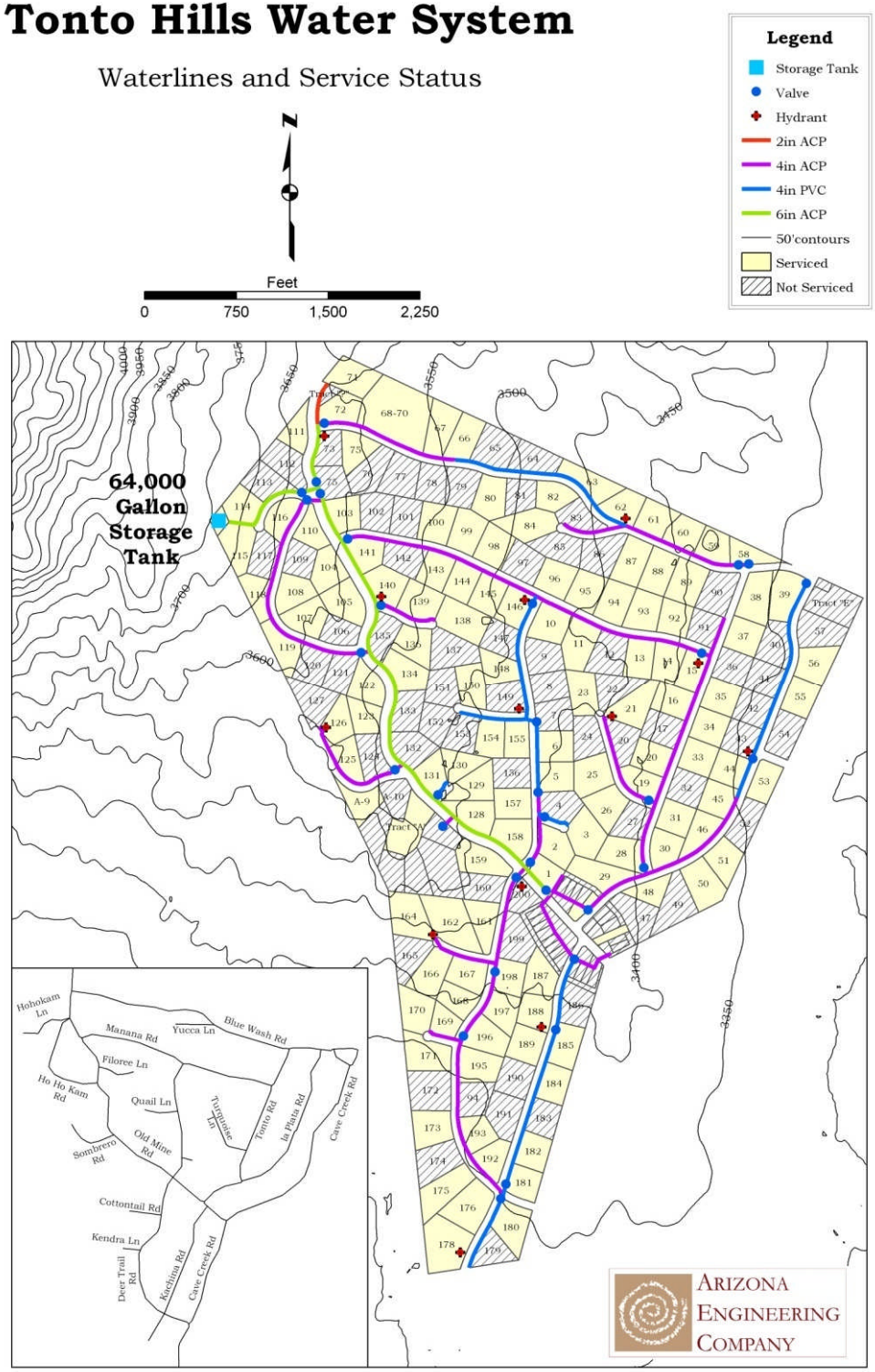


Table 3.1 – Tonto Hills Water Infrastructure Inventory & Estimated Present Value

Item	Qnt.	Unit	2008 Equiv. Unit Cost	2008 Equiv. Cost	Year Installed	Est. Installation Cost	Est. Depreciation Rate	Est. Present Value
6" ACP Pipe	5,555	LF	$50	$277,750	1960	$67,215	8.00%	$1,228
4" ACP Pipe	20,076	LF	$40	$803,040	1960	$194,335	8.00%	$3,551
4" PVC Pipe	8,008	LF	$40	$320,320	1990	$188,154	8.00%	$41,946
2" ACP Pipe	330	LF	$20	$6,600	1960	$1,597	8.00%	$29
6" Gate Valve	6	EA	$900	$5,400	1960	$1,307	2.00%	$496
4" Gate Valve	17	EA	$700	$11,900	1960	$2,880	2.00%	$1,092
4" Gate Valve	10	EA	$700	$7,000	1990	$4,112	2.00%	$2,858
4" Fire Hydrant	7	EA	$1,000	$7,000	1990	$4,112	2.00%	$2,858
4" Fire Hydrant	6	EA	$1,000	$6,000	2005	$5,491	2.00%	$5,168
64,000 gal Storage Tank	1	EA	$110,000	$110,000	1960	$26,620	12.22%	$51
2 1/2" PVC Sch.80 Tank Fill Line	300	LF	$22	$6,600	1990	$3,877	6.00%	$1,273
2 1/2" Backflow Preventer	1	EA	$500	$500	2000	$395	6.67%	$227
2 1/2" Tank Control Valve	1	EA	$800	$800	2000	$632	6.67%	$364
Service Connection	10	EA	$1,200	$12,000	1960	$2,904	3.33%	$571
Service Connection	30	EA	$1,200	$36,000	1970	$11,708	3.33%	$3,233
Service Connection	30	EA	$1,200	$36,000	1980	$15,735	3.33%	$6,096
Service Connection	30	EA	$1,200	$36,000	1990	$21,146	3.33%	$11,494
Service Connection	30	EA	$1,200	$36,000	2000	$28,419	3.33%	$21,674
Service Connection	3	EA	$1,200	$3,600	2008	$3,600	3.33%	$3,600
TOTAL				**$1,722,510**		**$584,237**		**$107,810**

Assessment

In general, we believe the condition of the existing infrastructure has been accurately represented by the Tonto Hills Utility Company. The system operates in a similar manner as like systems of the same age.

However, there are risks associated with operating this system, and several improvements should be considered.

Waterlines

- **Inspected waterline in three locations**
- **Existing asbestos concrete pipe (ACP) and polyvinyl chloride (PVC) in good condition**
- **Shallow ground cover 16 to 24 inches**
- **General locations known, but need more detail for system map**
- **Pressure rating for pipe appears adequate**

Hydraulic Analysis

- **WaterCAD computer model to assess system performance with typical standards**
- **Historic water usage lower than typical design standards (ave = 222 gal/day/home)**
- **Waterline diameters are adequate to serve ultimate build-out (without fire flow)**
- **System pressures approach 200 psi. Standard is 80 – 100 psi. Recommend 3 pressure reducing valves**
- **Low pressure (<40 psi) for lots 114 and 115**

System Water Losses

- **Comparing 2007 City of Scottsdale meter readings to customer meters = 12.4% loss rate**
- **Standard loss rate 10% - 15%**

Water Valves

- **Two new valves required for isolation on Old Mine Road**
- **Recommend implementing a valve exercising program**

Water Quality

- **Water quality for tri-halo methanes (TTHM) is just above the maximum contamination limit (MCL) of 80 parts per billion (ppb)**
- **Most likely caused by dead ends and low occupancy in cul-de-sacs**
- **Recommend a flushing program and eliminating dead ends at the intersections of Tonto Rd and La Plata Rd with Blue Wash Rd.**

CAP Water Supply

- **The Central Arizona Project (CAP) water supply is highly reliable and domestic water users have priority over other CAP users in times of drought**
- **The CAP entitlement of 71 acre-ft/yr exceeds the projected build-out demand of 56 acre-ft/yr**
- **Maintain lease on Blue Wash well for backup**

City of Scottsdale Supply

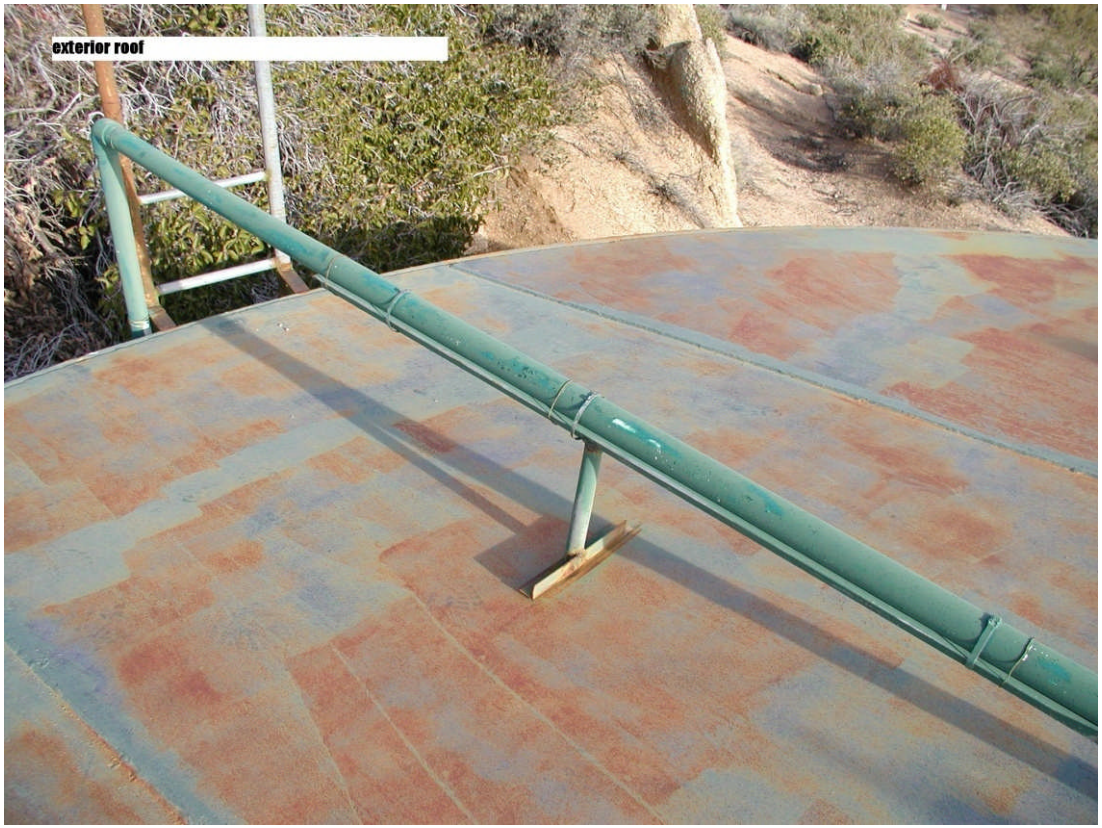
- **City of Scottsdale water delivery is highly reliable with many redundancies built in.**
- **Truck in water for rare limited and unlikely City outage.**
- **City conveyance agreement limit of 3.0 million gallons per month sufficient to meet estimated ultimate use of 2.2 million gallons**
- **Supply line flow rate is not being regulated, but agreement limit instantaneous flow to 70 gallons per minute.**

Storage Tank

- **The existing storage tank is about 9,000 gallons short on capacity to meet ultimate build-out requirements**
- **Tank will be undersized in 10 to 15 years assuming a growth rate of 4 homes per year**
- **The tank fill line is PVC and the above ground portion should be replace with steel pipe.**
- **The tank interior and exterior required immediate recoating.**

Storage Tank

Storage Tank



Operation & Maintenance

Item	Quantity	Unit	Unit Cost	Total Cost
Water Sampling Labor	60	HR	$60	$3,600
Water Sampling Laboratory Test	32	EA	$100	$3,200
Meter Reading Field Labor	96	HR	$60	$5,760
New Water Service Connections	4	EA	$1,200	$4,800
Meter Replacement	10	EA	$300	$3,000
Miscellaneous Maintenance	1	LS	$5,000	$5,000
Forest Service Well Lease	1	EA	$60	$60

TOTAL **$25,420**

Minimum Improvements

Item	Quantity	Unit	Unit Cost	Total Cost
Locate waterlines and valves from fixed monuments and document	1	LS	$5,000	$5,000
Install new 6" gate valves on Old Mine Rd.	2	EA	$1,000	$2,000
*Implement cul-de-sac flushing program	1	LS/YR	$1,500	$1,500
Connect 4" waterline loop in Blue Wash Rd.	425	LF	$40	$17,000
Connect 4" waterline loop in Tonto Road	400	EA	$40	$16,000
Recoat tank interior and exterior	1	LS	$41,000	$41,000
Install tank bypass line for temporary tank connection	1	LS	$5,000	$5,000
Install above ground 2-1/2" steel tank fill line	50	LF	$20	$1,000

TOTAL $88,500

Likely Improvements

Item	Quantity	Unit	Unit Cost	Total Cost
Implement valve exercising plan	1	LS/YR	$1,200	$1,200
Install main line PRV	3	EA	$15,000	$45,000
Patch storage tank floor if required	1	LS	$8,000	$8,000

TOTAL **$54,200**

Worst Case Improvements

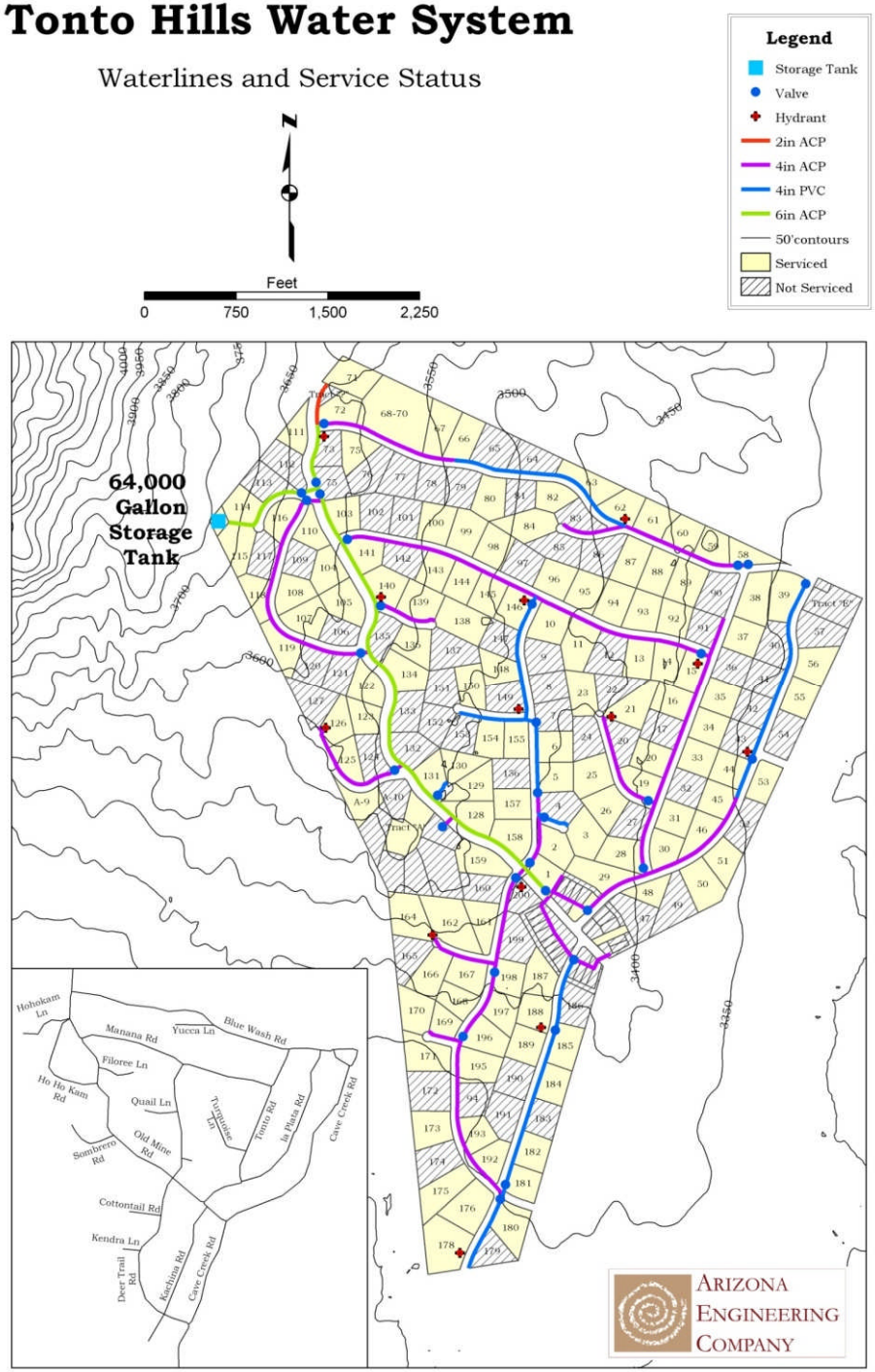
Item	Quantity	Unit	Unit Cost	Total Cost
Truck in water for in case City water supply is disrupted	3	DAYS	$2,200	$6,600
Re-outfit well and treatment equipment in event of CAP water shortage	1	LS	$600,000	$600,000
Replace washed out waterline with 4" restrained joint ductile iron pipe	40	LF	$80	$3,200
Replace pressure failed waterline with 4" restrained joint ductile iron pipe	40	LF	$80	$3,200
Replace waterline failed due to heavy equipment loading	20	LF	$80	$1,600
Replace existing storage tank with new 100,000 gallon tank if structural damage is discovered during maintenance	1	LS	$150,000	$150,000
TOTAL				**$764,600**

Improvement Summary

- **Minimum Improvements: $88,500**
- **Likely Improvements: $54,200**
- **Worst Case Improvements: $764,600**
- **TOTAL $907,300**

Tonto Hills Water System

Waterlines and Service Status



Tonto Hills Utility Company
Financial Analysis Summary

Bob Swan

Experience

BS – Management, Arizona State University

MBA – Finance and Accounting, UCLA

California CPA

✓15 years at KPMG (formerly Peat Marwick, Mitchell & Co.)

✓Audit Partner

✓Focus: growing small business growth, public & not-for-profit companies

✓Clients' growth through acquisitions (which we evaluated), IPOs and sales efforts

Chief Financial Officer

✓10 years at 2 public companies and 2 privately-held companies

✓Evaluated and acquired business subsidiary subsequently taken public via IPO

Water Committee's Financial Investigation Summary by Area

Purpose – Determine if THUC is a desirable investment

Private Company – non-disclosure agreements

Contracts

- ✓1998 CAP Transfer Agreement with BHP Copper, Scottsdale & Carefree
- ✓2000 Water Line Easement & Quitclaim deed with Desert Mtn
- ✓2000 City of Scottsdale Treatment and Transportation of Water
- ✓2001 CAP Subcontract (replacement: 2007)

Financial Statements & General Ledger

Billings & Disbursements

WIFA Debt

Insurance

Corporate Income Tax Returns

ACC Utilities Division Annual Report

Principal Assets and Obligations

Assets

- ✓Certificate of Convenience and Necessity
- ✓CAP Water Allotment & Contract
- ✓Scottsdale Contract to Treat & Deliver
- ✓System:
  - 64,000 gallon tank
  - Pipeline – 6.5 miles
  - 2 parcels
  - 1 well leased on U.S. Forest Service land

Obligations

- ✓WIFA Loan

Central Arizona Project Subcontract Summary

100-year Term to 2108

All up-front costs already paid, with small annual delivery costs

71 acre-feet per year available (over 23 million gallons per year)

34 acre-feet per year acquired for 2008 (over 11 million gallons per year)

Equal priority delivery guarantee

No quality guarantee

City of Scottsdale Contract for Treatment and Transportation of Water Summary

50-year Term with 25-year Renewals Possible

One-time charges for increases in water demand

Monthly billings for actual consumption – largest THUC expense

Excess delivery billing if annual actual consumption exceeds that pre-scheduled

Maximum delivery of 70 gallons per minute and 3 million gallons per month total (average demand is significantly less)

Delivery guaranteed up to maximums above, unless not delivered by CAP or pre-noticed scheduled Scottsdale maintenance

Quality guaranteed – at point of entry into Tonto Hills

Tonto Hills Utility Company Revenues

1996 to 2007 (12 years) over $1,374,000

✓Annual average of $114,500

Average growth rate last 3 years: 9%

2008 expected to be over $155,000

Tonto Hills Utility Company Profits

No corporate income taxes

Depreciation adjustments

Average net earnings rate of 7% of revenues

Range of adjusted annual net earnings rate of positive 30% to negative 17%

Tonto Hills Utility Company Possible Plans

Possible future uses of “profits” (DWID is non-profit)

- ✓Service additional debt, if incurred
- ✓Hire management
- ✓Pay Scottsdale water rate increases
- ✓Upgrade infrastructure
- ✓Build cash for future major infrastructure needs

DWID Initial Annual Operating Costs

Operating and Maintenance, as per PER	$25,360
Water Up-front Acquisition Costs	? TBD
Water Treatment and Transport Costs	$60,000 - $65,000
Accounting	$11,000 - $15,000
Other Professional Services	? TBD
Debt Servicing:	
✓Current WIFA Loan ($217K principal)	$24,972
✓Current Repair and Replacement Fund	$4,994
✓Possible future borrowings	? TBD
Presently estimable total range – cash	$126,326 - $135,326
Depreciation	? TBD

Tonto Hills Utility Company Summary

Obtained long-term CAP water allocation

Obtained Scottsdale delivery and treatment

Reliably deliver water

Generating a profit

DWID Process

Don Rex

Domestic Water Improvement District (DWID)

- **DWID is an alternative means of owning and managing a water company**
  - ✓ **Formation regulated by Maricopa County**
  - ✓ **Initial request by petition signed by majority of property owners**
  - ✓ **DWID managed by an elected Board of Directors**

Domestic Water Improvement District (DWID)

- **DWID Management**
  - ✓ **County oversight of DWID minimal**
  - ✓ **County Board of Elections rules regulate all elections of the DWID Board of Directors**
  - ✓ **Board of Directors manage the DWID and set all rates**
  - ✓ **County Board of Supervisors become involved only if needed to mediate issues that cannot be resolved by DWID Board**

DWID & Government Oversight

- **DWID Formation**

  - ✓ **Formation of DWID governed by ARS 48-903 & 48-909**

  - ✓ **County inspection of current system required:**
    - **Relatively simple inspection, similar to inspection currently required by State every 3 to 5 years for THUC and all water systems**
    - **O&M inspection**
    - **Inspection for leaks and water quality**

  - ✓ **County Board of Supervisors requires report from ACC on the "standing" of the current water company**

DWID & Government Oversight

- **DWID Formation (continued)**

  - ✓ **Initially, County Board of Supervisors forms County Improvement District prior to formation of DWID per ARS 48-909, allowing County full control over transfer of ownership and continuation of water service**

  - ✓ **When County is satisfied new water district is running properly, the County Improvement District will be converted to a DWID managed by our Board of Directors**

Conclusions, Next Steps and Open Forum

Rick Nelson

What Can the Players Control?

- **Owners of CAP allocation may use it as they wish subject to:**
  - ✓ **Arizona Corporation Commission (ACC)**
  - ✓ **Arizona Department of Water Resources (ADWR)**
  - ✓ **Central Arizona Project (CAP)**

- **THUC is one of few Private Water Companies to hold CAP allocation**
  - ✓ **There is NO precedent for potential actions here**

- **Currently NO statutes or regulations have been identified that prevent possible relocation of THUC CAP allocation**

What Are the Risks?

- **CAP allocation could be moved to other Arizona areas**
  - ✓ **Certificate of Convenience and Necessity (CC&N) requires any utility owner to provide us with water**
  - ✓ **Source not specified**
  - ✓ **Quantity not clearly specified**
  - ✓ **Cost increase unknown**
  - ✓ **ACC would be involved in the decision process**
- **Each of us must consider the Risks in context with Our Lives**

Individual Assessment of Risk

- **Each of us must consider the Risks in context with Our Lives**
- **Do you believe Local Control of TH water is Essential?**
- **How much risk are You willing to accept given Loss of Control?**
- **What are You willing to Pay to ensure Local Control?**
- **Is “No Action” really a Prudent Alternative?**

Short-Term Options

- THIA Option to Purchase Ends July 1, 2008
- Annexation Will Require Years, It's Not a Short-term Option
- Only Short-Term Options: 1. No Action
  2. Form DWID to Purchase THUC
- DWID Provides Way to Control Water Supply for Either:
  - Long-Term Ownership, Operation & Maintenance

  OR

  - Later Donation to Scottsdale as Part of Annexation

If Community Selects DWID

- **Planning ahead, file application as potential DWID, for placement on WIFA loan Priority List**
- **Conduct initial price discussions with THUC**
- **Notify Maricopa County of possible formation of DWID**
- **Initiate DWID Petition effort**
- **Submit petition to Maricopa County for certification**
- **Form DWID and apply for WIFA loan**
- **Finalize agreement to purchase THUC**
- **Begin DWID operations**

Open Forum

- **Water Committee assignment is completed**
- **PER and Financial Summary will be posted on the WEB and are available to anyone upon request**
- **Unanswered questions and action items will be covered at the Annual General Meeting**