

Wrap-up of the 1st day

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Wrap-up: 1st day

Helena Alegre

- Framework
 - Global risks, drivers, challenges and opportunities.
 - Making 1+1=3 by connecting the dots (utilities and their knowledge).
- Infrastructure asset management
 - <Objectives> Aiming at balancing of performance, risk and cost.
 - Encouraging dynamic adaptation and integrated thinking.
 - Holistic IAS for resilient, adaptive and sustainable urban water infrastructure
 - IWA Strategic Asset Management Specialist Group
 - <How to> <u>optimize service</u>, <u>risk and cost</u>?
 - Role of standardization to set a national level AM.
 - PDCA cycle (chains at multiple levels)
 - How to get AM started? Establish AM as a on-going concept.
 - Free (public domain) software

Steve Wyton, Calgary

- Drivers for Canadian asset management
 - Accidents of infrastructures, Walkerton accident, ,,
- Recent initiatives and trends
 - Provincial regulation requiring asset and financial management
- Customer communication
 - Municipal customer engagement, eGovernment, report state of infrastructure
 - Annual citizen communication survey
- Challenge
 - Difficult to link the level of service (LOS) with the cost
 - Reducing revenue, increasing cost of filling the infrastructure gap
- Steps for asset management
 - <u>Set the level of services</u>: customer communication, cost requirements
 - Determine risk exposure: strategic risk assessment
 - Quality rating
- Initiatives for asset management in Canada
 - Canadian network of asset management
 - National water/ wastewater benchmarking initiative

Aurel Arndt, Lehigh County Authority, USA

- Generating support for infrastructure sustainability
- Water service stakeholders:
 - utility management, public officials, customers, legislators, business, media.
 - Knowledge gap.
- AWWA infrastructure finance.
 - Nessie curve (dinosaur)
 - Only tap water delivers. Help utilities for infrastructure investment.
 - Moving water infrastructure dialogue above ground.
 - Annual AWWA Infrastructure report. Buried no longer.
- Pennsylvania Water Infrastructure Task Force Report/ Lehigh County
 - Public education: adults, children
 - Messages: true value of water, water infrastructure to economy, water resources protection
 - Water taste testing competition among the local utilities
 - HydroMania for kinds. Collaboration with local universities.
 - Drinking water Operator's Day
 - Water LCA benchmarking: service outages, water main breaks, UfW

Tom Mollenkopf, Australian Water Assoc.

- Background, in Australia
 - Climate change, need to integrate new technologies, small systems
- International Asset Management/ Benchmarking
 - IWA benchmarking projects/ LCA/ IWA-WSAA International Asset Management
 - Defining the task of Asset Management/ Benchmarking
 - Aquamark Framework to examine whole of businesses
 - Go beyond data collecting, Interactive and reviewing process to select the best practice among 42 participating utilities in the world.
 - Benchmarking: drivers to change in each region
 - Highs and Lows: technical and operational highest, while corporate and strategic decision making lagged
 - Length of time involved affects "maturity" of asset management
 - Chance to learn from
- Emerging issues in Asset Management
 - Less focus on water scarcity, flood event
 - Intelligent networks: real time data collection (IT technologies)

Paul Freeman, Sydney Water, Australia.

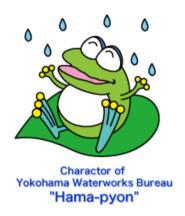
- "Critical Water Mains Strategy"
- Regulatory asset base (RAB)
- Tariff impacts of CAPEX
- Ensure the capital is recovered over the economic life of water infrastructure: \$4.85 per \$ 100 M of investment
- Test of capital prudence
 - IPART: Engaging Ofwat auditors from UK
 - Renewal decision framework
- Life Cycle Management
 - Model-based assessment of risks and costs: economy of failure
- Customer impacts, traffic disruption costs, time lost by passengers
- Risk profile of critical water mains
- Critical customers
- System resilience: simulating network failure, customer impacts

- Asset management and public relations are closely linked to each other
 - Water utilities need public support for investment
 - Setting the goal of services and cost
 - Bringing up the water assets above ground
- Big picture, bigger than the Nessie
 - Need to have a big picture, long-term perspective in water utility management
- IT technologies, modeling approach
 - Assisting tools for smaller utilities
- Making 1+1=3 by connecting water utilities









Wrap-up of the 2nd day

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Wrap-up: 2nd day

- Hiroyuki Kondo, Yokohama Waterworks
 - Background:
 - investment curve in water infrastructure in Japan
 - Anti-earthquake water supply systems
 - Asset management in Japan
 - Waterworks vision 2008, Guideline for AM 2009
 - AIM: setting priority, accountable to the customers
 - AM in Yokohama Waterworks
 - Aging infrastructure, decreasing revenue > AM
 - Prioritization: importance, risks, impact on customers, etc.
 - "Expected useful life time" based on the life time data
 - Energy use for water intake and transmission
 - Reflecting customer's opinion to the management
 - Customer survey in every 3 years
 - Earthquake, radio activity, winning public trust

Wrap-up: 2nd day

- Walter Kling, Vienna Waterworks
 - "Valuable infrastructure, AM and customer satisfaction"
 - Background: Uniqueness of Vienna waterworks
 - Natural spring water protected by law, taken and distributed by gravity flow to Vienna (Hochquellenleitung)
 - No treatment, excellent quality: customers take it fro granted.
 - Building brand image of Vienna water: innovation, technology, ,,
 - Economic, environmental and social requests
 - Reliability, enough capacity, efficiency, meeting requirements
 - Utilities are responsible for filling the knowledge gap of customers
 - Making water "visible": water fountains, kids program
 - Asset management
 - Networks information system vs. public view > make it visible to the customers: before and after rehabilitation
 - Legal framework; aiming to fill the knowledge gap.

Wrap-up: 2nd day

- Christopher Laughlin, South West Water Ltd.
 - "Water industry experience in the UK"
 - Historical background of UK water industry
 - Before 1973: fragmented local water utilities (> 1,000)
 - 1973: Forced legal consolidation to 10 companies, shared common agreements (WaterAid), but still underinvestment
 - 1989: Privatization, Regulated "Comparative Competition", Independent regulators
 - AM keys: sound and reliable data, "Common framework" as a basis of AM
 - balancing investment and "willingness-to-pay"
 - customer support for 5 year plan, "Focus Groups", Ofwat testing
 - Climate change
 - Requires large amounts of investment in water infrastructure

- Your impression and suggestions to the Japanese water utilities?
 - Similarities and differences in Japan and your utility
- Sustainable management of water utilities
 - Setting long-term management goals under uncertainties
 - How to make use of AM? Small utilities?
 - Human resource management
 - Any efforts for capacity building?
 - Program for HR development?

- Promoting asset management
 - Small water utilities?
 - Guideline, computer models and tools?
- Benchmarking
 - How to use benchmarking?
 - Selecting benchmarking parameters?
- Funding water infrastructure
 - Any roles, needs of private sector funding?
 - Is the Japanese water sector still attractive for the investors?

- AM methods and tools
 - Role of standardization of the AM process
 - Guideline, framework, regulation, requirements
 - ISO24500; ISO/TC224
 - Asset Management; basic concept?
 - Usefulness and limitations of model-based approach
 - System failure impacts to the customers and the society
 - Accuracy of the estimated risks
 - How to improve the models?

- Public relations
 - Setting the goal of water supply services
 - Filling the knowledge gap between customers and utilities
 - Balancing the level of service, risks and costs
 - Difference among the customers?
 - Low-income families?
 - Any negative effects of disclosing the risks?
 - How to use limited budget for PR more efficiently?
 - Efficient and effective tools for RP? IT-based tools?
- Future networking activities?
 - Big picture, global risks and uncertainties
 - Making 1+1 > 200