

Drinking Water Safety Plans and their introduction into Alberta, Canada

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The views expressed in this presentation are those of the authors and do not necessarily reflect the views or policies of the Government of Alberta.

And I'd like to thank...



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<http://www.dailymail.co.uk/tvshowbiz/article-2282295/Study-reveals-Oscar-winners-thank-Harvey-Weinstein-God-half-mention-Academy.html>

Preamble

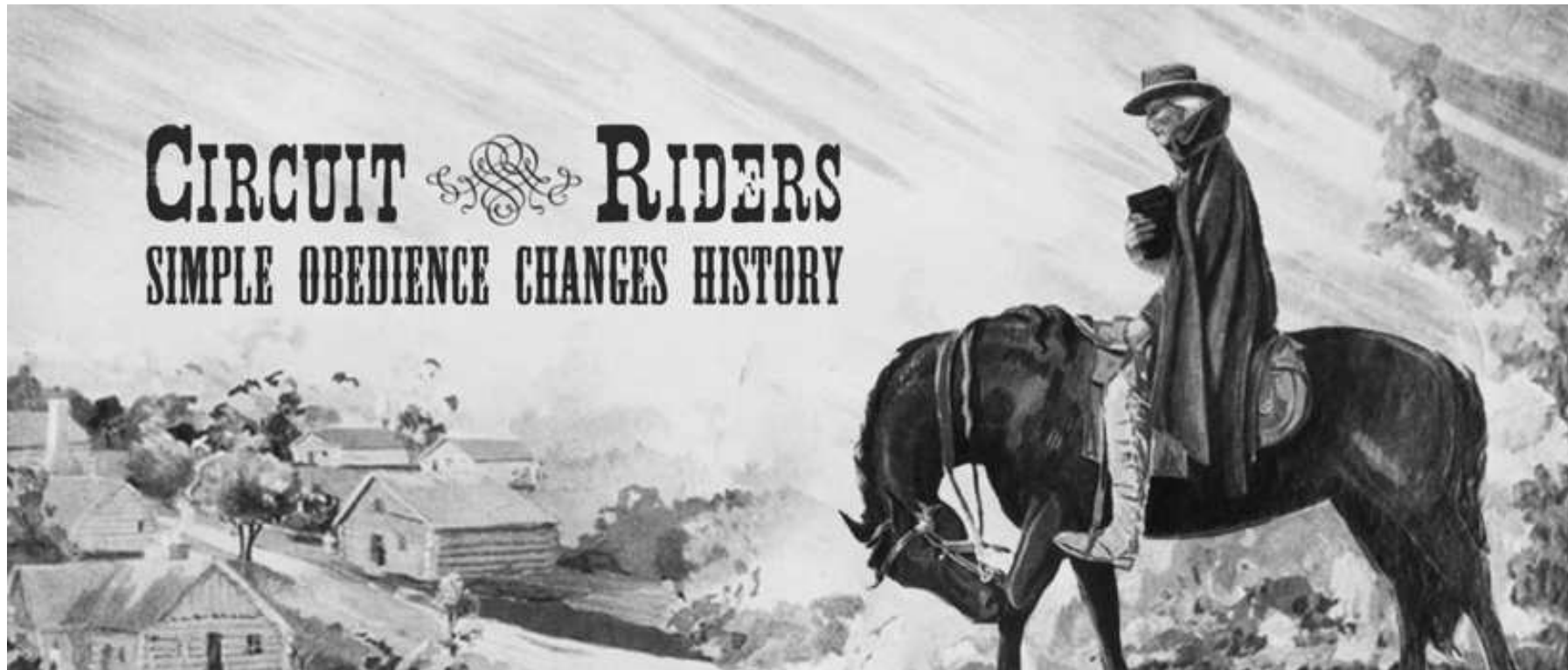
Implementation of Alberta's drinking water safety plans. Reid, D.C. *et al* (2014) Water Quality Research Journal of Canada 49:1 5- 9.

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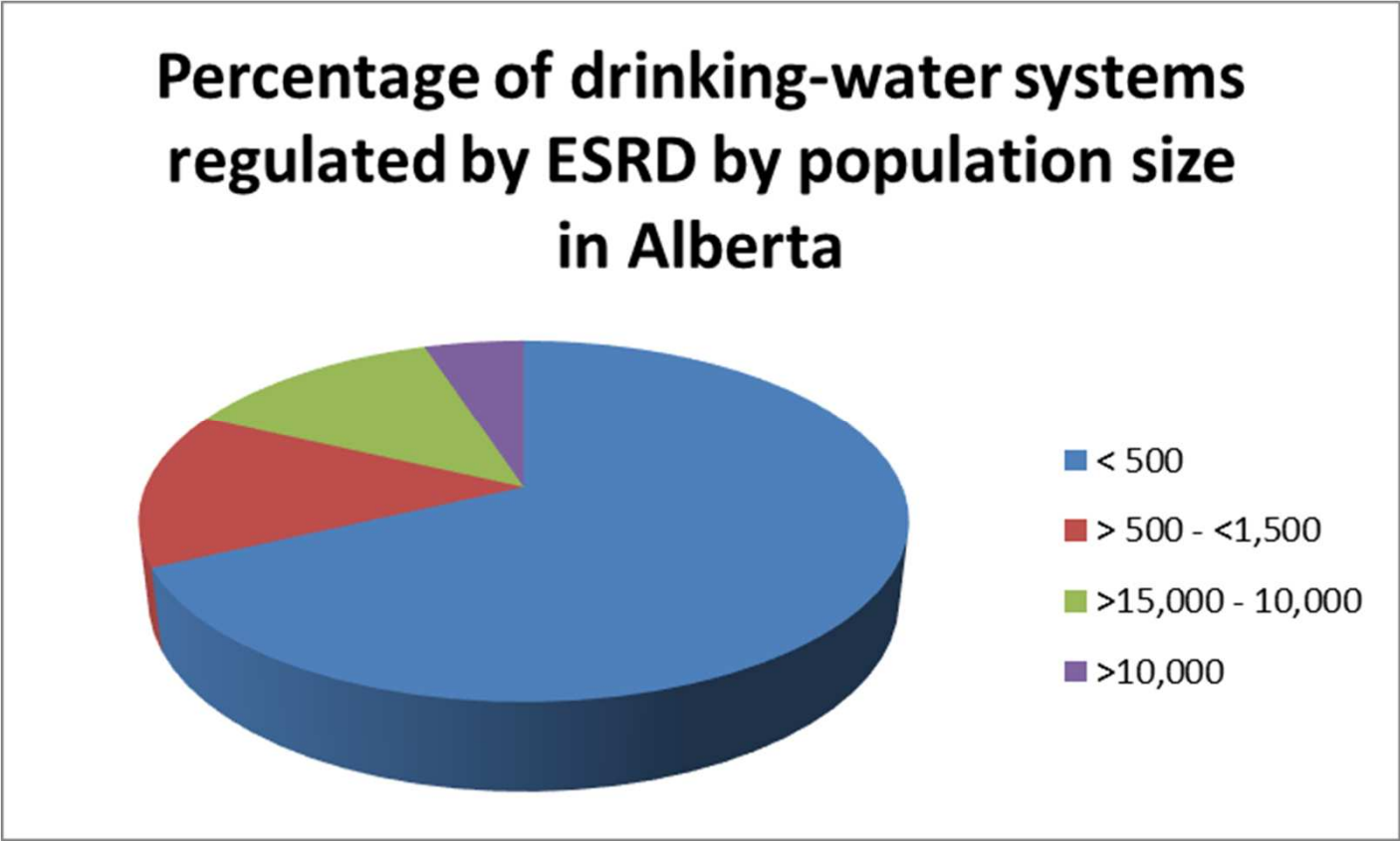
<http://environment.alberta.ca/apps/regulateddwq/DWSP.aspx>

Drinking Water Operations Specialist (DWOS)



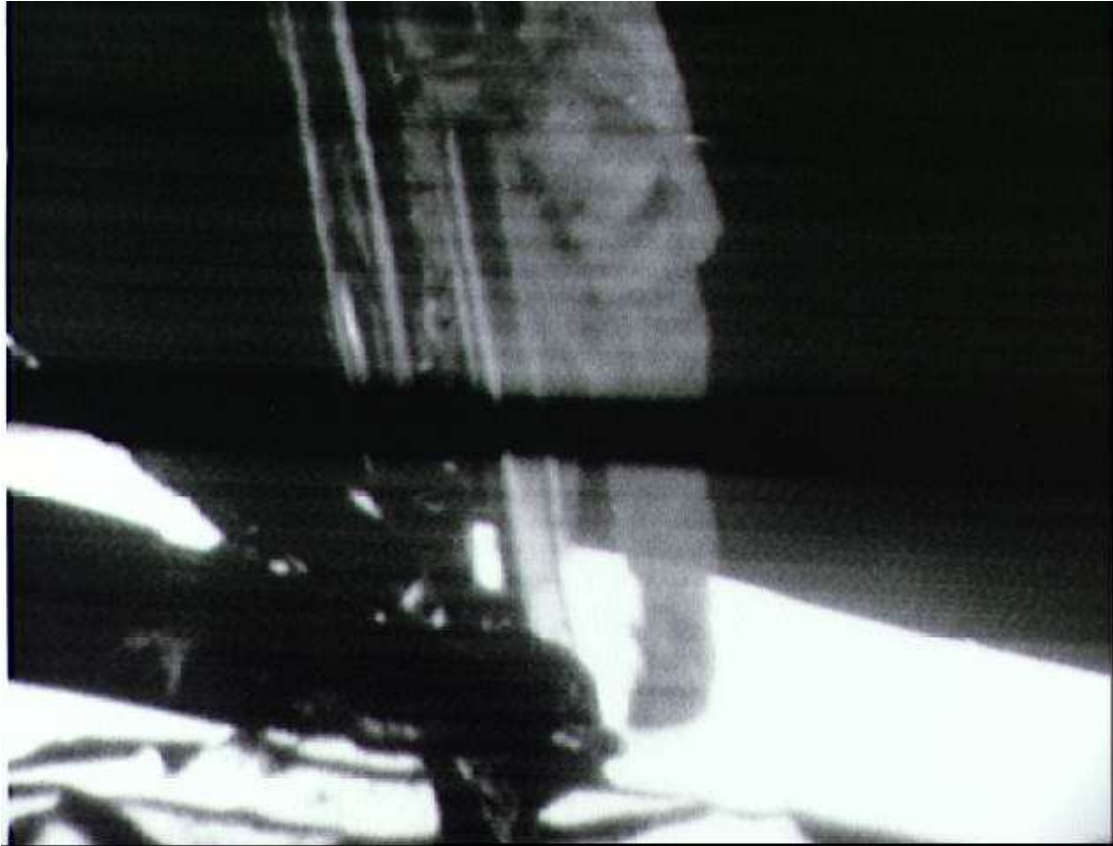
Source: <http://thecircuitrider.com/school-of-the-circuit-rider/>

Drinking-water systems regulated by ESRD



Based on 2011 figures. n = 650

One small step for policy makers, one giant leap for operators



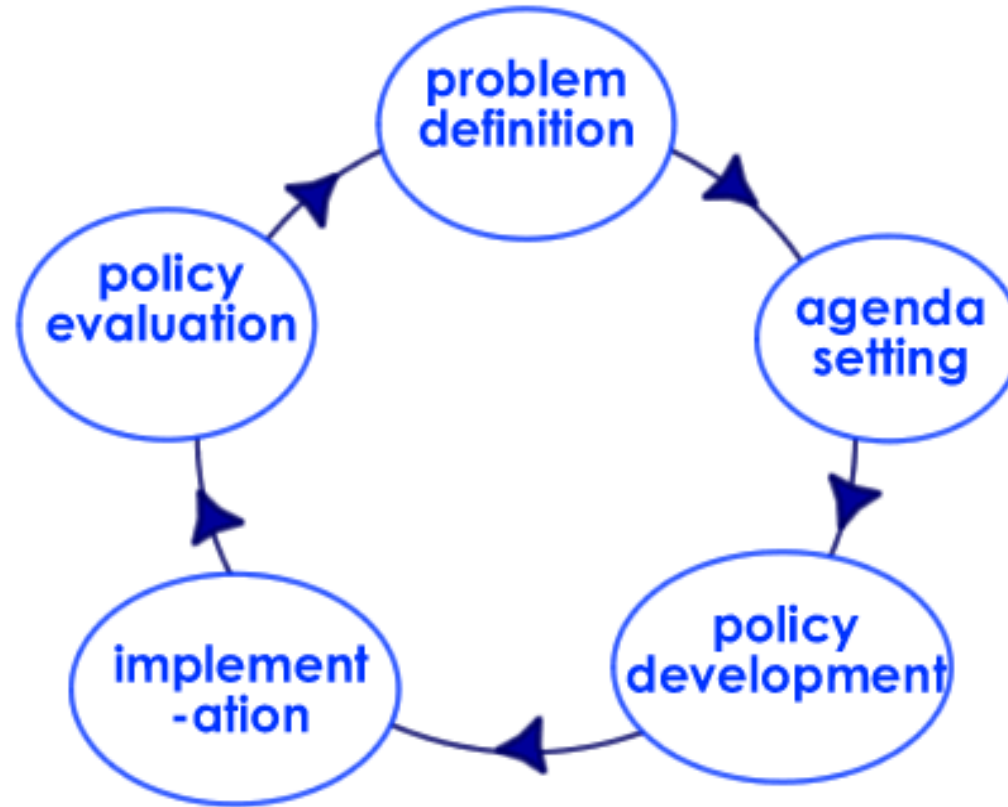
Of course, the original was:

“That’s one small step for [a] man, one giant leap for mankind”

with apologies to the late Neil Armstrong.

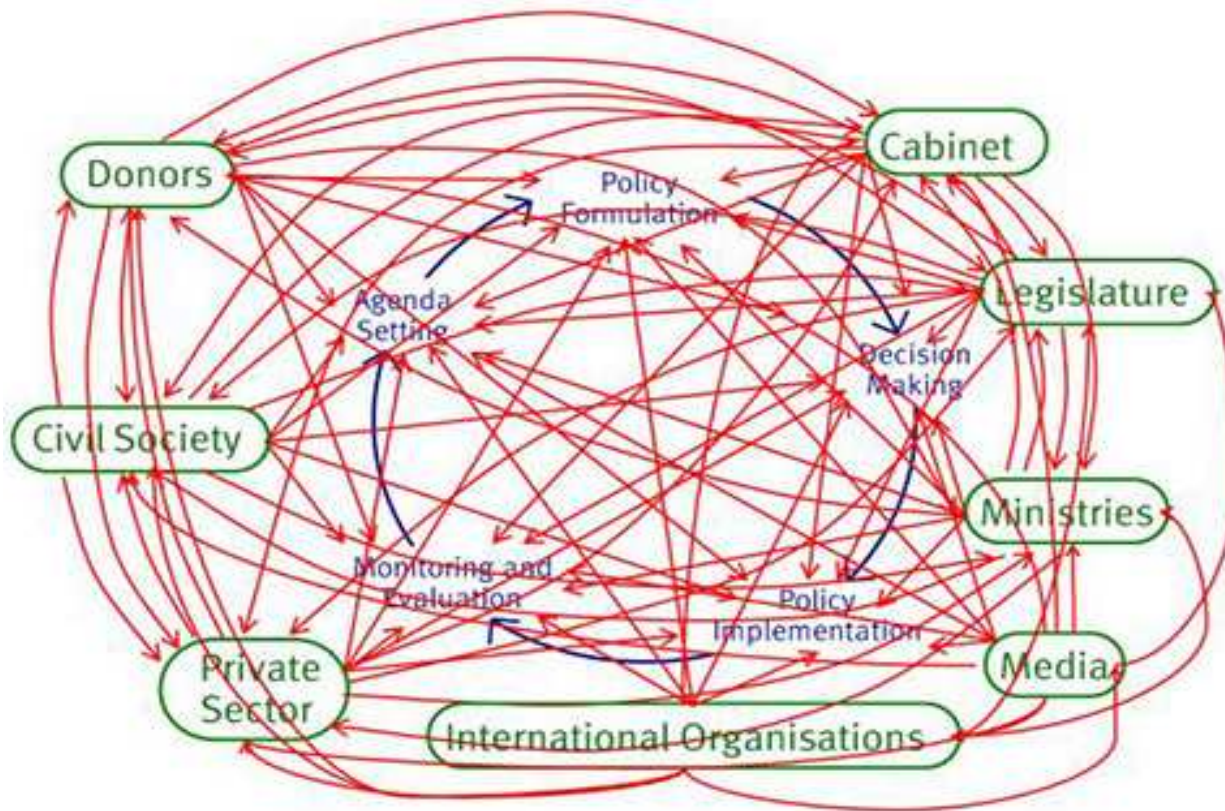
Source: <http://nssdc.gsfc.nasa.gov/planetary/lunar/images/a11tvarm.jpg>

The 'policy cycle'



Source: <http://europeandcis.undp.org/blog/2013/06/28/policy-2-0-can-we-move-beyond-the-classic-policy-cycle/>

The 'policy cycle'



Source: <http://www.wellcome.ac.uk/Education-resources/Engagement-with-your-research/Public-engagement-opportunities/Government-and-science-policy/WTS040421.htm>



“Make it so, Number One!”

Source: <http://www.wired.com/geekdad/2013/01/readers-choice-tv-quotes/>

The warbird design referred to as *D'deridex*-class, B-type warbird, or Warbird class was one of the largest and most powerful mainstays of the Romulan Star Empire. It served as the backbone of the Romulan fleet during the latter half of the 24th century



Source: http://en.memory-alpha.org/wiki/D'deridex_class

The Operators



Source: <https://awwoa.ab.ca/home/content/1064>

Who'd be an operator?

- Understanding the environment in which the system operates
- A full understanding of public health requirements
- Monitoring responsibilities and skills
- An appropriate system for recording and retrieving data
- Financial management and planning
- Risk management
- Communications skills to assist with effective communication to stakeholders
- The skills to operate each element of the water supply system
- Technical design and detailed technical knowledge
- The provision of an analytical laboratory capability at the treatment works and an ability to interpret the results
- An understanding of legislation and legal responsibilities
- Asset management
- Customer relations and charters



How did
we do?

Source: <http://www.rm-solutions.com/blog/bid/311911/Managing-customer-feedback-in-your-independent-pharmacy>

Alberta 

ESRD training and on-going support from DWOS

- 2011/12
 - 15 workshops
 - 250 communities
 - 355 individuals
- 2012 and continuing
 - Drinking Water Operations Specialists (DWOS) have leading role in providing small-group or individual training support to operators.

Comments from DWOS

“I had to go out to the Village of X in December to go over the DWSP with the Chief Accounting Officer (CAO), mayor and operator to stress the importance and cooperation to get these done.

The operator wasn't receiving any support from management to complete them and as a result, felt overwhelmed.

After the meeting, the CAO and Mayor were supportive in understanding the time requirements, the significance of the plan and the need for cooperation on all levels to finish the document.”

Comments from DWOS

“After about March this year (2013), I never sat for a session without the first level of ‘money manager’ present - usually CAO. They were easier to sell to than the operators.

Many of the moderate-sized town operators (who do everything and control everything with one assistant) don't often like the DWSP concept.”

Comments from DWOS

“When asked about their experience Community Y said:

‘reluctantly started it, painfully finished it, began to appreciate that it forced them to draw existing data together – then were pleasantly surprised when we successfully used it to justify an improvement we thought we may not be able to push through otherwise.’ ”

Closer-to-Home Webinar for officials



www.awwoa.ab.ca

Participants:

- 24 municipalities
- ~ 60 people

The *WaterWise Alberta Series*
Drinking Water Safety Plans

Information Session #3 February 21, 2013

 **FREE INFORMATION SESSION - REMINDER** 
Thursday, February 21, 2013 Noon - 1PM

This email is a reminder, for all those that haven't already registered, that the next *WaterWise Alberta* Information Session will be on Thursday, February 21, 2013.
To register please complete and return the form below.

The *WaterWise Alberta Series* is a set of free information sessions designed to inform, educate and support local elected officials, administrators, public works officials and others responsible for municipal drinking water and wastewater. The *WaterWise Alberta Series* is part of the Closer to Home (C2H) Initiative funded in part by the Rural Alberta Development Fund (RADF).

- Learn your responsibilities as owners and the key questions to ask your Operators
- Learn new topics and what other municipalities are doing
- Pose questions to some of the leaders in the water and wastewater industry.

This is the third event in the series which will run throughout 2013. The session is delivered through both teleconference and a web based platform.

Drinking Water Safety Plans (DWSP) - What They Are and Oversight of Their Development
Presenter
Dr. Donald Reid
Drinking Water Specialist
Regional Integration Branch
Alberta Environment & Sustainable Resource

Drinking Water Safety Plans (DWSP) - What They Are and Oversight of Their Development

By session end, participants should be able to discuss:

- The concept of a Drinking Water Safety Plan (DWSP) as a risk-based, quality management approach;
- The role of DWSP within the current drinking water regulatory

Closer-to-Home Operator training

- DWSPs led to a better understanding of the concepts of risk as applied to waterworks generally, as well as to their specific utility/operating context;
- More sensitised to specific examples of risk;
- Risk is not necessarily something which is “bad” or an “operator performance” issue, but rather represents factors to be identified, classified, managed and/or mitigated as possible;
- Reinforced the importance of being continually vigilant and responsive “before little problems become big problems”;

Closer-to-Home Operator training

- Engage waterworks safety planning and operations as one with shared roles and responsibilities between operators and officials;
- Helped to identify specific issues, problems, practices, or procedures within their own waterworks that require modification or action for improvement or change.
- Many operators intuitively and tacitly manage risk but don't perceive many specific risks as risks at all, or as risky as it may actually be, and benefit from the intervention of a reframing dialogue with colleagues who have similar experiences in other systems.

Dalhousie University project

Early adopters are recognized within innovation research as helping to demystify a new technology or innovation among their peers, and as helping to “trigger the critical mass” to adopt a new innovation.

Dalhousie



Source: <http://www.pasca-halifax.org/wp-content/uploads/2010/03/dalhousie.jpg>

“Maybe if I had had a course on how to talk to councillors...we’re hands-on fix-it guys and we go into council and try to talk to them, that’s probably my biggest issue”

Dalhousie



Source: <http://www.pasca-halifax.org/wp-content/uploads/2010/03/dalhousie.jpg>

“Most of our councillors are farmers, you can talk about gravelling and grading roads and they understand that because the grader goes up and down in front of their house four or five times a year. But none of them live in the community so they don’t see the problems with the drinking-water system”

Dalhousie



Source: <http://www.pasca-halifax.org/wp-content/uploads/2010/03/dalhousie.jpg>

“I do have support from the town council and the CAO. Anything that needs to be done to the water plant, there’s no hesitation, so that’s a big support. Without that you can’t go anywhere”

Dalhousie



Source: <http://www.pasca-halifax.org/wp-content/uploads/2010/03/dalhousie.jpg>

“We had time, so we said, ‘Fine, we’ll get rid of it then we don’t have to play with it anymore.’ It’s done. Filed. We’re never going to look at it again and if anybody asks to see it we’ll show them and then they can go away too!”



Source: <http://montyrainey.files.wordpress.com/2012/04/blog-fish-jump.jpg>

Alberta 

Culture change – always a challenge



Source: <http://itsaboutthemoney.net/archives/2010/04/27/the-great-debate-closing-remarks-at-long-last/>

“That’s one small step for [a] man, one giant leap for mankind.”

Neil Armstrong, Tranquility Base, July 20, 1969

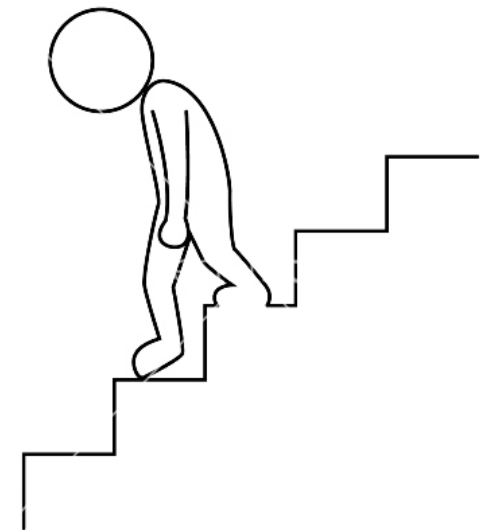


Aldrin's boot and footprint in lunar soil

Source: <http://history.nasa.gov/ap11ann/kippsphotos/5880.jpg>

Habit is habit and not to be flung out of the window by any man [or policy maker or regulator], but coaxed downstairs a step at a time.

Mark Twain 1835 – 1910



Source: <http://www.vectorstock.com/royalty-free-vector/sad-businessman-walking-downstairs-vector-1545014>