

The Expectations that affect the Management of Public Forest and Range Lands in British Columbia:

Looking Outside the Legislation

Part 5 – Concluding Remarks

11. Concluding Remarks

When the FPC was in effect, our attention remained fixed inside the statutory regime created by that Act – a statutory regime administered by government officials. With the enactment of the FRPA, the focus of our attention has begun to shift. Many if not most, of the decisions that forest and range tenure holders now make are no longer regulated. Does this mean that these decisions no longer matter? Obviously not. However, it does mean that the most important expectations affecting these decisions do not come from the FRPA. To understand where these expectations do come from, we need to look beyond the FRPA and the statutory regime it has created.

When we look outside the legislation, we discover that the most important expectations affecting our lives owe nothing to the power of governments or government officials. In the case of forest and range tenure holders, perhaps the most important discovery is that deregulation does not confer “immunity” from societal expectations, or from the expectations that arise in the common law world of civil liability. For this reason, tenure holders may find that deregulation will not necessarily make their decisions any easier.

At the same time, the loss of control that comes with deregulation may prove unsettling for government officials. For the public, which has long been accustomed to having government officials fulfil the combined role of trustee and steward, the prospect of having tenure holders assume many of the responsibilities associated with the latter role may prove equally unsettling.

The first impulse for many may be to try to find ways to pull things back inside the familiar world of statutory regimes administered by government officials. But even if they were to succeed, this would not necessarily improve the quality of the decisions that forest and range tenure holders are called upon to make.

The ultimate test of the efficacy of forest and range management decisions is not how many of them fall within the ambit of a statutory regime administered by government official. What matters is what happens on the ground.

If public forest and range lands thrive, will our society really care all that much whether the decisions that helped them to do so were part of a statutory regime or not? And if public forest and range lands do not thrive, will it be any comfort to be able to say that the decisions that led to this outcome were regulated?

Regulatory controls are not the only, or even the best, way to facilitate sound decision-making. Indeed, when it comes to making sound decisions, knowledge is often a more powerful force than the law. In this paper, we have touched on two important ways in which knowledge can be brought to bear on forest and range management decisions:

- Through the effective use of well-qualified, dedicated professionals; and
- Through the effective use of well-crafted, thoughtful guidance documents.

The power of knowledge lies at the heart of the unique role that professionals play in our society. Experience has taught us that reliance on the advice and opinions of professionals can often be the wisest course. Nonetheless, reliance cannot be blind. We cannot absolve ourselves of our responsibilities simply by employing professionals. Having said this, if professionals are deserving of their accreditation, then ignoring their advice or opinions is seldom a prudent choice.

But how do we know whether they are deserving of their accreditation?

This brings us to the challenge confronting the self-regulating professions: ensuring their member are deserving – and remain deserving – of accreditation. To that end, the associations that govern these professions need to concern themselves not only with the conduct of their members, but also with their expertise or competence. Professional reliance has no meaning unless professionals adhere – and are known to adhere – to the highest possible standards of conduct **and** competence.

Which is why the associations that govern the self-regulating professions are empowered to regulate their members. However, this does not mean that they can regulate their members' clients. In the forest and range management context, it is important to remember that professional reliance does **not** offer an alternative to government regulation, i.e. it should not be seen as another way to control the actions and decisions of forest and range tenure holders. While resource management professionals can have great influence over tenure holders, they cannot control them.

The same holds true for guidance documents. They too can have great influence, but they cannot control.

Guidance documents are another manifestation of the power of knowledge. As such, they too play a pivotal role in helping us to make wise decisions. But even when these documents touch on issues in the legal realm, it is important to remember that they do not regulate. Guidance documents are not laws.

Laws are not created to be debated or thoughtfully considered. They are created to be obeyed. Legislation, in particular, is designed with an eye to exacting obedience. This does not mean that laws are never questioned, nor does it mean they never change. As discussed in Chapter 5, laws are questioned and they do change. However, so long as they remain in effect, we expect them to be enforced.

Guidance documents, on the other hand, are not enforced. The very idea of trying to enforce a guidance document, or even trying to assess “compliance” with such a document, is inherently contradictory. Simply put, a guidance document lacks the requisite authority to compel obedience. Accordingly, rather than pretending otherwise, a good guidance document takes an entirely different tack: it tries to make us think. And the more we think, the better our decisions are likely to be. Which means a good guidance document can be a powerful force.

But there is a caveat that needs to be kept in mind when developing a guidance document. There is always the possibility that the intended audience will not be persuaded by it and will choose to disregard it.

This possibility cannot be avoided simply by blurring the line between guidance and direction. The lessons learned from the FPC guidebooks should make this clear. To draw on an old saw, “you can’t have your cake and eat it, too.” No matter how tempting it might be to try, you can’t regulate through guidance.

As we conclude our discussion of these and other issues, let’s pause to consider what might be the next chapter in the saga of public forest and range lands in B.C. The common law is changing. It now encompasses new principles of liability for environmental damage and we face the very real possibility that the public trust doctrine, which evolved in the United States, may become part of Canadian common law. If this happens, the statutory regime created by the FRPA may be only one of the forces shaping the legal realm, and perhaps even a minor force at that.

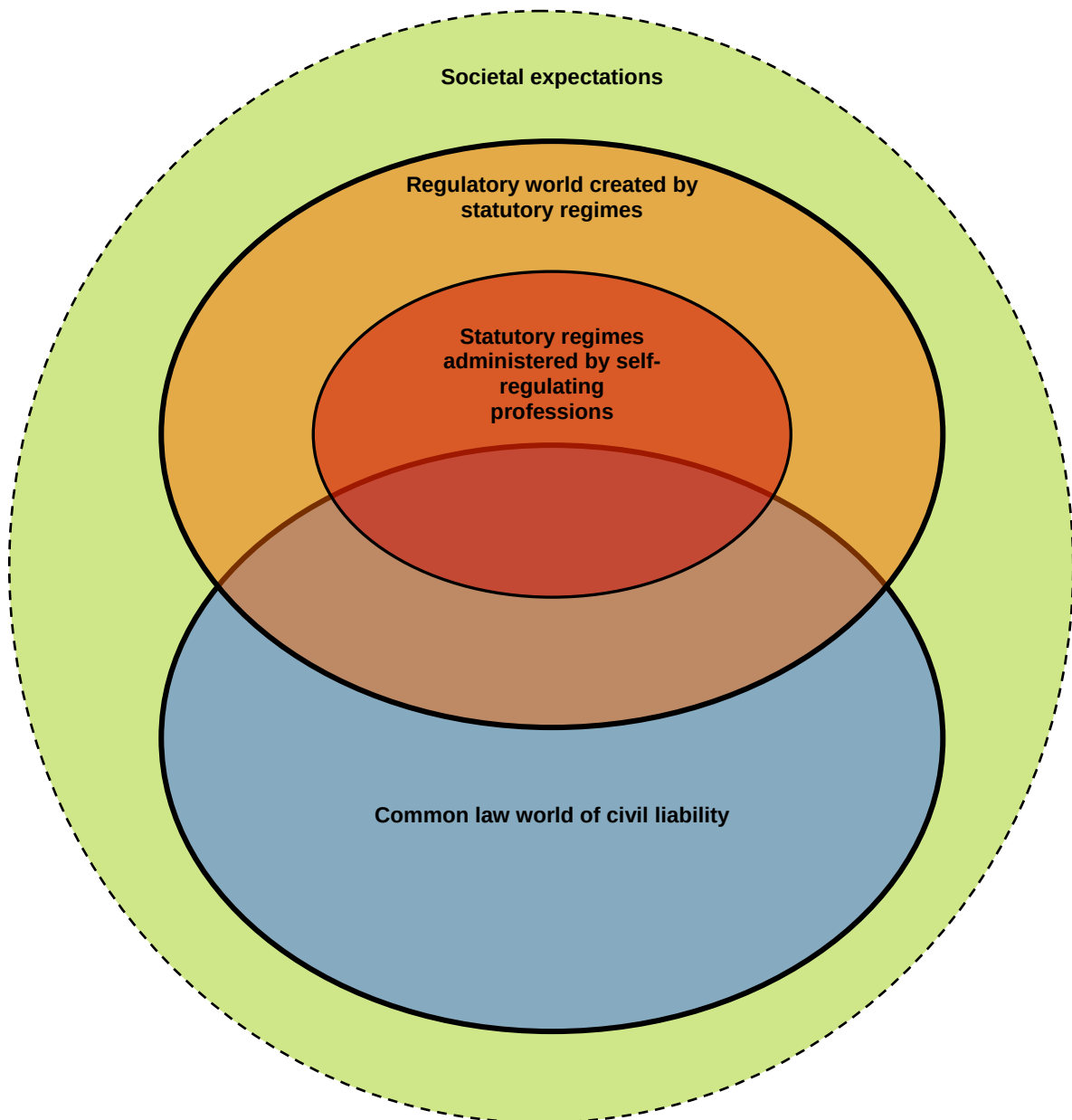
What lies outside the legal realm may be even more important. The most powerful forces to be reckoned with are societal expectations and the scientific/technical knowledge that, without actually seeking to do so, inevitably shapes these expectations. Indeed, scientific/technical knowledge does more than shape societal expectations; it also has a direct bearing on important concepts in the legal realm, including the due diligence defence provided for under the FRPA and the standard of care that applies in the context of common law negligence suits.

All of which means that, far from being the end of the saga, the FRPA is likely to be only a small part of one of the early chapters of a new saga. In order to make reasonable predictions about what is likely to happen next, we need to look outside the legislation. However, rather than embarking on the difficult task of predicting the future, this paper has confined itself to mapping out the key features of the legal and non-legal realms. I hope that this map will enable others to predict – and perhaps even influence – the next chapter of the saga.

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Appendix 1: Another Way Of Looking At Things

Here is another way of looking at the different facets of the legal realm. The diagram below is an alternative to Diagram 1 on p. 19. What it illustrates more effectively than Diagram 1 is the way in which the statutory regimes that apply to the self-regulating professions fit into the regulatory world. In most respects, these statutory regimes are just like the statutory regimes created by the FRPA and other Acts. What distinguishes them is the fact that they are administered by the self-regulating professions themselves. The diagram below also illustrates how the common law world and the regulatory world overlap, which is why tenure holders and the professionals who advise and assist them need to consider both, as well as the non-legal realm of societal expectations.



Appendix 2: Non-Government Publications

The publications listed below are all accessible through the Internet.¹¹ They represent only a sampling of the journals and other information readily available to professionals involved in the management of public forest and range lands in B.C., as well as to interested members of the public. Even a brief examination of some of these journals suggests that there is an impressive amount of private sector research that is directly relevant to the management of public forest and range lands in B.C.

NOTE: This list does not include publications produced by the MOFR or the MOE. Public sector research is discussed in Appendix 3. Having said this, many public sector researchers, including researchers in the MOFR and the MOE, do publish in these private sector journals.

[Acta Forestalia Fennica](http://www.metla.fi/julkaisut/acta) (<http://www.metla.fi/julkaisut/acta>)

See also Silva Fennica

[Agricola](http://agricola.nal.usda.gov): The National Agricultural Library Article Citation Database (<http://agricola.nal.usda.gov>)

[Agricultural and Forest Entomology](http://www.blackwell-synergy.com/servlet/useragent?func=showIssues&code=afe) (<http://www.blackwell-synergy.com/servlet/useragent?func=showIssues&code=afe>)

[Agricultural and Forest Meteorology](http://www.sciencedirect.com/science/journal/01681923) (<http://www.sciencedirect.com/science/journal/01681923>)

[Ambio - A Journal of the Human Environment](http://www.ambio.kva.se) (<http://www.ambio.kva.se>)

[American Naturalist](http://www.journals.uchicago.edu/AN/journal/index.html) (<http://www.journals.uchicago.edu/AN/journal/index.html>)

[American Statistician](http://www.amstat.org/publications/tas) (<http://www.amstat.org/publications/tas>)

[Annals of the Association of American Geographers](http://www.aag.org/Publications/annalsweb1.html) (<http://www.aag.org/Publications/annalsweb1.html>)

[Annual Reviews](http://www.annualreviews.org): (<http://www.annualreviews.org>)

- [Earth and Planetary Sciences](http://arjournals.annualreviews.org/loi/earth) (<http://arjournals.annualreviews.org/loi/earth>)

¹¹ Links for these and other publications can be found on the public website of the MOFR / MOE Library (http://www.for.gov.bc.ca/hfd/library/lib_journals.htm). The MacMillan Library at the University of British Columbia also provides links to a wide range of online reference materials (<http://toby.library.ubc.ca/webpage/webpage.cfm?id=100>), as well as access to online journals (<http://toby.library.ubc.ca/ejournals/ejournals.cfm>).

- [Ecology, Evolution and Systematics](http://arjournals.annualreviews.org/loi/ecolsys) (http://arjournals.annualreviews.org/loi/ecolsys)
- [Entomology](http://arjournals.annualreviews.org/loi/ento) (http://arjournals.annualreviews.org/loi/ento)
- [Environment and Resources](http://arjournals.annualreviews.org/loi/energy) (http://arjournals.annualreviews.org/loi/energy)
- [Genetics](http://arjournals.annualreviews.org/loi/genet) (http://arjournals.annualreviews.org/loi/genet)
- [Phytopathology](http://arjournals.annualreviews.org/loi/phyto) (http://arjournals.annualreviews.org/loi/phyto)

[BC Journal of Ecosystems and Management](http://www.forrex.org/JEM) (http://www.forrex.org/JEM)

[Biodiversity](http://www.tc-biodiversity.org/bio_open_page.htm) (http://www.tc-biodiversity.org/bio_open_page.htm)

[Biological Conservation](http://www.sciencedirect.com/science/journal/00063207) (http://www.sciencedirect.com/science/journal/00063207)

[Biometrics](http://tibs.org/biometrics) (http://tibs.org/biometrics)

[Bioscience](http://www.aibs.org/bioscience) (http://www.aibs.org/bioscience)

[British Columbia Naturalist](http://www.naturalists.bc.ca/index.htm) (http://www.naturalists.bc.ca/index.htm)

[Bulletin of Environmental Contamination and Toxicology](http://www.link.springer.de/link/service/journals/00128)
(http://www.link.springer.de/link/service/journals/00128)

[Bulletin of the American Mathematical Society](http://www.ams.org/bull) (http://www.ams.org/bull)

[Canadian Entomologist](http://www.esc-sec.org/canent1.htm) (http://www.esc-sec.org/canent1.htm)

[Canadian Field Naturalist](http://www.ofnc.ca/cfn.htm) (http://www.ofnc.ca/cfn.htm)

[Canadian Geographer](http://www.blackwellpublishing.com/journal.asp?ref=0008-3658) (http://www.blackwellpublishing.com/journal.asp?ref=0008-3658)

[Canadian Journal of Economics](http://economics.ca/cje) (http://economics.ca/cje)

[Canadian Journal of Plant Science](http://pubs.nrc-cnrc.gc.ca/aic-journals/cjps.html): Agricultural Institute of Canada (http://pubs.nrc-cnrc.gc.ca/aic-journals/cjps.html)

[Canadian Journal of Program Evaluation](http://www.uofcpress.com/UCP/CJPE.html) (http://www.uofcpress.com/UCP/CJPE.html)

[Canadian Journal of Remote Sensing](http://www.casi.ca/index.php?pg=cjrs) (http://www.casi.ca/index.php?pg=cjrs)

[Canadian Journal of Soil Science](http://pubs.nrc-cnrc.gc.ca/aic-journals/cjss.html): Agricultural Institute of Canada (<http://pubs.nrc-cnrc.gc.ca/aic-journals/cjss.html>)

[Canadian Water Resources Journal](http://pubs.nrc-cnrc.gc.ca/cwrj/cwrj.html) (<http://pubs.nrc-cnrc.gc.ca/cwrj/cwrj.html>)

[Conservation Biology](http://conbio.net/SCB/Publications/ConsBio) (<http://conbio.net/SCB/Publications/ConsBio>)

[Conservation in Practice](http://www.conbio.org/CIP/) (<http://www.conbio.org/CIP/>)

[Copeia](http://apt.allenpress.com/aptonline/?request=get-archive&issn=0045-8511): American Society of Ichthyologists and Herpetologists
(<http://apt.allenpress.com/aptonline/?request=get-archive&issn=0045-8511>)

[Ecoforestry](http://www.ecoforestry.ca/default.htm) (<http://www.ecoforestry.ca/default.htm>)

[Ecological Applications](http://www.esapubs.org/esapubs/journals/applications.htm) (<http://www.esapubs.org/esapubs/journals/applications.htm>)

[Ecological Indicators](http://www.sciencedirect.com/science/journal/1470160X) (<http://www.sciencedirect.com/science/journal/1470160X>)

[Ecological Monographs](http://www.esapubs.org/esapubs/journals/monographs_main.htm)
(http://www.esapubs.org/esapubs/journals/monographs_main.htm)

[Ecologist](http://www.theecologist.org) (<http://www.theecologist.org>)

[Ecology](http://www.esapubs.org/esapubs/journals/ecology_main.htm) (http://www.esapubs.org/esapubs/journals/ecology_main.htm)

[Ecology and Society](http://www.ecologyandsociety.org) (<http://www.ecologyandsociety.org>)

[Ecosystems](http://www.link.springer.de/link/service/journals/10021/about.htm) (<http://www.link.springer.de/link/service/journals/10021/about.htm>)

[EM](http://www.awma.org/pubs/aboutem.htm): A&WMA's Magazine for Environmental Managers
(<http://www.awma.org/pubs/aboutem.htm>)

Entomological Society of America Publications:

- [Annals of Entomological Society of America](http://www.entsoc.org/pubs/periodicals/ann)
(<http://www.entsoc.org/pubs/periodicals/ann>)
- [Environmental Entomology](http://www.entsoc.org/pubs/periodicals/ee) (<http://www.entsoc.org/pubs/periodicals/ee>)
- [Journal of Economic Entomology](http://www.entsoc.org/pubs/periodicals/jee) (<http://www.entsoc.org/pubs/periodicals/jee>)

[Entomological Society of Canada Bulletin](http://www.esc-sec.org/bulletin1.htm) (<http://www.esc-sec.org/bulletin1.htm>)

[Environmental Conservation](http://www.cambridge.org/uk/journals/journal_catalogue.asp?historylinks=SUBJ&mnemonic=ENC)
(http://www.cambridge.org/uk/journals/journal_catalogue.asp?historylinks=SUBJ&mnemonic=ENC)

[Environmental Ethics](http://www.cep.unt.edu/enethics.html) (<http://www.cep.unt.edu/enethics.html>)

[Environmental Monitoring and Assessment](http://www.environmental-center.com/magazine/kluwer/ema) (<http://www.environmental-center.com/magazine/kluwer/ema>)

[Environmental Quality Management](http://www3.interscience.wiley.com/cgi-bin/jhome/60500185) (<http://www3.interscience.wiley.com/cgi-bin/jhome/60500185>)

[Environmental Science and Technology](http://pubs.acs.org/journals/esthag/) (<http://pubs.acs.org/journals/esthag/>)

[Environments – A Journal of Interdisciplinary Studies](http://www.fes.uwaterloo.ca/research/environments/) (<http://www.fes.uwaterloo.ca/research/environments/>)

[Erosion Control](http://www.erosioncontrol.com/ec.html): The Journal for Erosion and Sediment Control Professionals (<http://www.erosioncontrol.com/ec.html>)

[European Journal of Soil Science](http://www.blackwellpublishing.com/journal.asp?ref=1351-0754) (<http://www.blackwellpublishing.com/journal.asp?ref=1351-0754>)

[Evolution](http://evol.allenpress.com/evolonline/?request=index-html) (<http://evol.allenpress.com/evolonline/?request=index-html>)

[Forest Ecology and Management](http://www.sciencedirect.com/science/journal/03781127) (<http://www.sciencedirect.com/science/journal/03781127>)

[Forest Pathology](http://www.blackwellpublishing.com/journal.asp?ref=1437-4781) (<http://www.blackwellpublishing.com/journal.asp?ref=1437-4781>)

[Forest Policy and Economics](http://www.sciencedirect.com/science/journal/13899341) (<http://www.sciencedirect.com/science/journal/13899341>)

[Forest Science](http://www.safnet.org/periodicals/forestscience.cfm) (<http://www.safnet.org/periodicals/forestscience.cfm>)

[Forestry – An International Journal of Forest Research](http://forestry.oxfordjournals.org) (<http://forestry.oxfordjournals.org>)

[Forestry Chronicle – Journal of the Canadian Institute of Forestry](http://pubs.nrc-cnrc.gc.ca/tfc/TFC.html) (<http://pubs.nrc-cnrc.gc.ca/tfc/TFC.html>)

[Frontiers in Ecology & the Environment](http://www.frontiersinecology.org) (<http://www.frontiersinecology.org>)

[Harvard Business Review](http://www.hbsp.harvard.edu/products/hbr/index.html) (<http://www.hbsp.harvard.edu/products/hbr/index.html>)

[Human Dimensions of Wildlife](http://www.tandf.co.uk/journals/titles/10871209.asp) (<http://www.tandf.co.uk/journals/titles/10871209.asp>)

[Hydrological Processes](http://www3.interscience.wiley.com/cgi-bin/jhome/4125) (<http://www3.interscience.wiley.com/cgi-bin/jhome/4125>)

[Hydrological Sciences Journal](http://www.wlu.ca/~wwwiahs/hsj/hsjindex.htm) (<http://www.wlu.ca/~wwwiahs/hsj/hsjindex.htm>)

[International Forestry Review](http://www.cfa-international.org/publications.html) (<http://www.cfa-international.org/publications.html>)

[International Journal of Forest Engineering](http://www.lib.unb.ca/Texts/JFE/Index.htm) (<http://www.lib.unb.ca/Texts/JFE/Index.htm>)

[International Journal of Wildland Fire](http://www.publish.csiro.au/journals/ijwf) (<http://www.publish.csiro.au/journals/ijwf>)

[International Journal of Wilderness](http://ijw.wilderness.net/toc.cfm) (<http://ijw.wilderness.net/toc.cfm>)

[Journal of Animal Ecology](http://www.blackwellpublishing.com/journal.asp?ref=0021-8790&site=1) (<http://www.blackwellpublishing.com/journal.asp?ref=0021-8790&site=1>)

[Journal of Applied Ecology](http://www.blackwellpublishing.com/journal.asp?ref=0021-8901) (<http://www.blackwellpublishing.com/journal.asp?ref=0021-8901>)

[Journal of Aquatic Animal Health](http://afs.allenpress.com/perlserv/?request=get-archive) (<http://afs.allenpress.com/perlserv/?request=get-archive>)

[Journal of Biology](http://jbiol.com/home/) (<http://jbiol.com/home/>)

[Journal of Ecology](http://www.blackwellpublishing.com/journal.asp?ref=0022-0477) (<http://www.blackwellpublishing.com/journal.asp?ref=0022-0477>)

[Journal of Environmental Management](http://www.sciencedirect.com/science/journal/03014797)
(<http://www.sciencedirect.com/science/journal/03014797>)

[Journal of Environmental Quality](http://jeq.sci-journals.org) (<http://jeq.sci-journals.org>)

[Journal of Forest Economics](http://www.elsevier-deutschland.de/jfe) (<http://www.elsevier-deutschland.de/jfe>)

[Journal of Forestry](http://www.safnet.org/periodicals/journal.cfm) (<http://www.safnet.org/periodicals/journal.cfm>)

[Journal of Hydrologic Engineering](http://www.pubs.asce.org/journals/he.html) (<http://www.pubs.asce.org/journals/he.html>)

[Journal of Leisure Research](http://rptsweb.tamu.edu/Journals/JLR/) (<http://rptsweb.tamu.edu/Journals/JLR/>)

[Journal of Pesticide Reform](http://www.pesticide.org/JPR.html) (<http://www.pesticide.org/JPR.html>)

[Journal of Range Management](http://uvalde.tamu.edu/jrm/jrmspec.htm) (<http://uvalde.tamu.edu/jrm/jrmspec.htm>)

[Journal of Raptor Research](http://biology.boisestate.edu/raptor/JRR.htm) (<http://biology.boisestate.edu/raptor/JRR.htm>)

[Journal of Soil and Water Conservation](http://www.swcs.org/en/publications/jswc) (<http://www.swcs.org/en/publications/jswc>)

[Journal of Sustainable Forestry](http://www.haworthpress.com/store/product.asp?sku=J091)
(<http://www.haworthpress.com/store/product.asp?sku=J091>)

[Journal of the Air & Waste Management Association](http://www.awma.org/journal) (<http://www.awma.org/journal>)

[Journal of the American Statistical Association](http://www.amstat.org/publications/jasa) (<http://www.amstat.org/publications/jasa>)

[Journal of the American Water Resources Association](http://www.awra.org/jawra) (<http://www.awra.org/jawra>)

[Journal of the Entomological Society of BC](http://esbc.harbour.com/journal.html) (<http://esbc.harbour.com/journal.html>)

[Journal of Water Resources Planning and Management](http://scitation.aip.org/wro) (<http://scitation.aip.org/wro>)

[Journal of Wildlife Diseases](http://www.jwildlifedis.org) (<http://www.jwildlifedis.org>)

[Journal of Wildlife Management](http://www.wildlife.org/publications/index.cfm?tname=journal)
(<http://www.wildlife.org/publications/index.cfm?tname=journal>)

[Lake and Reservoir Management](http://www.nalms.org/journal/lrm.htm) (<http://www.nalms.org/journal/lrm.htm>)

[Land and Water](http://www.landandwater.com/) (<http://www.landandwater.com/>)

[Land Economics](http://www.wisc.edu/wisconsinpress/journals/journals/le.html) (<http://www.wisc.edu/wisconsinpress/journals/journals/le.html>)

Landscape Ecology:

- Latest issues: [Volume 12, 1997-](http://www.springerlink.com/link.asp?id=103025) (<http://www.springerlink.com/link.asp?id=103025>)
- Back issues: [Volume 1, 1987 - Volume 12 \(2\), 1997](http://landscape.forest.wisc.edu/landscapeecology)
(<http://landscape.forest.wisc.edu/landscapeecology>)

[Leisure Sciences](http://www.tandf.co.uk/journals/titles/01490400.asp) (<http://www.tandf.co.uk/journals/titles/01490400.asp>)

[Limnology and Oceanography](http://aslo.org/lo) (<http://aslo.org/lo>)

[National Wildlife](http://www.nwf.org/nationalwildlife) (<http://www.nwf.org/nationalwildlife>)

[Natural Areas Journal](http://64.92.126.53/naj.htm) (<http://64.92.126.53/naj.htm>)

[Natural Hazards and Earth System Sciences](http://www.copernicus.org/EGU/nhess/published_papers.html)
(http://www.copernicus.org/EGU/nhess/published_papers.html)

National Research Council of Canada:

- [Biochemistry and Cell Biology](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?bcb) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?bcb)
- [Canadian Geotechnical Journal](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cgj) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cgj)
- [Canadian Journal of Botany](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjb) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjb)
- [Canadian Journal of Chemistry](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjc) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjc)

- [Canadian Journal of Civil Engineering](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjce) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjce)
- [Canadian Journal of Earth Sciences](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjcs) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjcs)
- [Canadian Journal of Fisheries & Aquatic Sciences](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjfas) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjfas)
- [Canadian Journal of Forest Research](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjfr) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjfr)
- [Canadian Journal of Microbiology](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjm) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjm)
- [Canadian Journal of Physics](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjp) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjp)
- [Canadian Journal of Zoology](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjz) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?cjz)
- [Environmental Reviews](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?er) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?er)
- [Genome](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?gen) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?gen)
- [Journal of Environmental Engineering and Science](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?jees) (http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_vols_e?jees)

[Natural Resource Modeling](http://rmmc.eas.asu.edu/abstracts/nrm/nrm.htm) (http://rmmc.eas.asu.edu/abstracts/nrm/nrm.htm)

[Natural Resources Journal](http://lawschool.unm.edu/Nrj/) (http://lawschool.unm.edu/Nrj/)

[Nature](http://www.nature.com/nature/index.html) (http://www.nature.com/nature/index.html)

[New Forests](http://www.springerlink.com/link.asp?id=102971) (http://www.springerlink.com/link.asp?id=102971)

[New Zealand Journal of Forestry Science](http://www.scionresearch.com/nzjfs+articles+to+download.aspx)
(http://www.scionresearch.com/nzjfs+articles+to+download.aspx)

[North American Journal of Fisheries Management](http://afs.allenpress.com/perlserv/?request=get-archive)
(http://afs.allenpress.com/perlserv/?request=get-archive)

[Northwest Science](http://www.vetmed.wsu.edu/org_NWS/Journal.htm) (http://www.vetmed.wsu.edu/org_NWS/Journal.htm)

[Oecologia](http://www.springerlink.com/link.asp?id=100458) (http://www.springerlink.com/link.asp?id=100458)

[Oikos - A Journal of Ecology](http://www.blackwellpublishing.com/journal.asp?ref=0030-1299): Nordic Ecological Society
(http://www.blackwellpublishing.com/journal.asp?ref=0030-1299)

[Physiologia Plantarum](http://www.blackwellpublishing.com/journal.asp?ref=0031-9317) (<http://www.blackwellpublishing.com/journal.asp?ref=0031-9317>)

[Plant and Soil](http://www.springerlink.com/link.asp?id=100326) (<http://www.springerlink.com/link.asp?id=100326>)

[Plant Disease](http://www.apsnet.org/pd/top.asp) (<http://www.apsnet.org/pd/top.asp>)

[Plant Science Bulletin](http://www.botany.org/PlantScienceBulletin) (<http://www.botany.org/PlantScienceBulletin>)

[Pollution Engineering](http://www.pollutionengineering.com) (<http://www.pollutionengineering.com>)

[Proceedings, National Academy of Sciences](http://www.pnas.org/contents-by-date.0.shtml) (<http://www.pnas.org/contents-by-date.0.shtml>)

[Professional Geographer](http://www.aag.org/Publications/pgweb1.html) (<http://www.aag.org/Publications/pgweb1.html>)

[Quarterly Journal of Forestry](http://www.rfs.org.uk/thirdlevel.asp?ThirdLevel=92&SecondLevel=7)
(<http://www.rfs.org.uk/thirdlevel.asp?ThirdLevel=92&SecondLevel=7>)

[Regional Journals of Applied Forestry](http://www.safnet.org/periodicals/regionaljournals.cfm)
(<http://www.safnet.org/periodicals/regionaljournals.cfm>)

[River Research and Applications](http://www3.interscience.wiley.com/cgi-bin/jhome/90010544) (<http://www3.interscience.wiley.com/cgi-bin/jhome/90010544>)

[Scandinavian Journal of Forest Research](http://www.tandf.co.uk/journals/titles/02827581.asp)
(<http://www.tandf.co.uk/journals/titles/02827581.asp>)

[Science](http://www.sciencemag.org) (<http://www.sciencemag.org>)

Society for Range Management Publications:

- [Rangelands](http://www.srmjournals.org) (<http://www.srmjournals.org>)
- [Rangeland Ecology and Management](http://www.srmjournals.org) (<http://www.srmjournals.org>)

[Silva Fennica](http://www.metla.fi/silvafennica/index.htm) (<http://www.metla.fi/silvafennica/index.htm>)
(see also Acta Fennica)

[Society of Wetland Scientists - Regional News](http://www.sws.org/regional/index.html) (<http://www.sws.org/regional/index.html>)

[Soil and Sediment Contamination](http://www.aehs.com/journals/soilcontamination) (<http://www.aehs.com/journals/soilcontamination>)

[Soil Mechanics and Foundation Engineering](http://www.springerlink.com/link.asp?id=106497)
(<http://www.springerlink.com/link.asp?id=106497>)

[Soil Science](http://www.soilsci.com) (<http://www.soilsci.com>)

[Soil Science Society of America Journal](http://soil.scijournals.org) (<http://soil.scijournals.org>)

[Streamline – Watershed Management Bulletin](http://www.forrex.org/Streamline) (<http://www.forrex.org/Streamline>)

[Studies in Avian Biology](http://www.cooper.org/COS/SAB_listing.html) (http://www.cooper.org/COS/SAB_listing.html)

[Sustainability: Science, Practice, & Policy](http://ejournal.nbii.org/) (<http://ejournal.nbii.org/>)

[Transactions of the American Fisheries Society](http://afs.allenpress.com/perlserv/?request=get-archive)
(<http://afs.allenpress.com/perlserv/?request=get-archive>)

[Tree Physiology](http://heronpublishing.com/tphome.html) (<http://heronpublishing.com/tphome.html>)

[Tree Ring Research](http://www.treeringsociety.org/TRS_journal.html) (http://www.treeringsociety.org/TRS_journal.html)

[Trees: Structure and Function](http://www.springerlink.com/link.asp?id=100387) (<http://www.springerlink.com/link.asp?id=100387>)

[Unasylva](http://www.fao.org/forestry/index.jsp): Food and Agriculture Organization of the United Nations Forestry Website
(<http://www.fao.org/forestry/index.jsp>)

United States Department of Agriculture Forest Service Publications:

- [USDA FS Forest Products Laboratory](http://www.fpl.fs.fed.us/document-lists/1-publication--list.html) (<http://www.fpl.fs.fed.us/document-lists/1-publication--list.html>)
- [USDA FS Pacific Northwest Research Station](http://www.fs.fed.us/pnw/publications/index.shtml)
(<http://www.fs.fed.us/pnw/publications/index.shtml>)
- [USDA FS Pacific Southwest Research Station](http://www.fs.fed.us/psw/publications) (<http://www.fs.fed.us/psw/publications>)
- [USDA FS Rocky Mountain Research Station](http://www.fs.fed.us/rm) (<http://www.fs.fed.us/rm>)
- [USDA FS Southern Research Station](http://www.srs.fs.usda.gov/pubs/index.htm) (<http://www.srs.fs.usda.gov/pubs/index.htm>)

[Water Environment Research](http://www.ingentaconnect.com/content/wef/wer;jsessionid=1xahz5ha2z79q.victoria)
(<http://www.ingentaconnect.com/content/wef/wer;jsessionid=1xahz5ha2z79q.victoria>)

[Water Quality Research Journal of Canada](http://www.cciw.ca/wqrjc/wqrjce.htm) (<http://www.cciw.ca/wqrjc/wqrjce.htm>)

[Water Resources Research](http://www.agu.org/journals/wr) (<http://www.agu.org/journals/wr>)

[Water Science and Technology](http://www.iwaponline.com/wst/toc.htm) (<http://www.iwaponline.com/wst/toc.htm>)

[Water 21](http://www.iwapublishing.com/template.cfm?name=iwapwater21) (<http://www.iwapublishing.com/template.cfm?name=iwapwater21>)

[Weed Science Journal](http://www.wssa.net/publications.html) (<http://www.wssa.net/publications.html>)

[Weed Technology Journal](http://www.wssa.net/publications.html) (<http://www.wssa.net/publications.html>)

[Wetlands](http://www.sws.org/wetlands) (<http://www.sws.org/wetlands>)

[Wildlife Biology](http://www.wildlifebiology.com) (<http://www.wildlifebiology.com>)

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Appendix 3: The Publications Of MOFR Research Staff

The MOFR's research program has been in existence for many years. A list of publications authored or co-authored by staff in the Research Branch, located in Victoria, can be found on the branch's public website: see <http://www.for.gov.bc.ca/hre/pubs>. These publications represent over 40 years of research, going back to 1963. The MOFR's research program goes back even further.

The three regional offices play an equally important role in the MOFR's research program. Publications written by regional research staff can be found on the following public websites:

- [Coast Forest Region Research Section](http://www.for.gov.bc.ca/rco/research)
(<http://www.for.gov.bc.ca/rco/research>)
- [Northern Interior Forest Region Research Section](http://www.for.gov.bc.ca/rni/research)
(<http://www.for.gov.bc.ca/rni/research>)
- [Southern Interior Forest Region Research Section](http://www.for.gov.bc.ca/rsi/research/index.htm)
(<http://www.for.gov.bc.ca/rsi/research/index.htm>)

To illustrate the nature and scope of the public sector research that is being carried out in B.C., what follows are some of the publications that were listed on the branch's website at the time this paper was written. These were published from January 2001 to January 2006. As noted above, the complete list of publications goes back to 1963. The regional websites include similar lists of publications.

2006 Publications:

- Stoehr, M., Mehl, H., Nicholson, G., Pieper, G. and Newton, C. 2006. **Evaluating supplemental mass pollination efficacy in a lodgepole pine orchard in British Columbia using chloroplast DNA markers.** *New Forests* 31:83-90.

2005 Publications:

- Stoehr, M., O'Neill, G., Hollefreund, C. and Yanchuk, A. 2005. **Within and among family variation of orchard and wild-stand progeny of interior spruce in British Columbia.** *Tree Genet. Genomes* 1:64-68.
- Eng, M. 2005. **Mountain Pine Beetle Projections: Answering Questions or Making Moonshine.** *Forum* 12(3):19.
- Eng, M.A., A. Fall, J. Hughes, T. Shore, B. Riel, and P. Hall. 2005. **Provincial-Level Projection of the Current Mountain Pine Beetle Outbreak: An Overview of the Model (BCMPB v2) and Results of Year 2 of the Project.**
<http://www.for.gov.bc.ca/hre/bcmpb/>

- Harper, G.J., P.G. Comeau and B.S. Biring. 2005. **A comparison of herbicide and mulch mat treatments for reducing grass, herb and shrub competition in the B.C. Interior Douglas-fir zone - Ten year results.** West. J. Appl. For. 20 (3): 167-178.
- vanAkker, L., R. Brockley, and R. Alfaro. 2005. **Interactions between fertilization and white pine weevil (*Pissodes strobi*) attack in young interior spruce plantations.** B.C. Ministry of Forests and Range, Victoria. Extension Note 75.
- Brockley, R.P. 2005. **Effects of post-thinning density and repeated fertilization on the growth and development of young lodgepole pine.** Can. J. For. Res. 35: 1952-1964.
- Goudie, J.W., Di Lucca, C.M., Klenner, W., Cameron, I.R., Parish, R., and Polsson, K.R. 2005. **Application of simulation models to design and analysis of silvicultural systems in British Columbia.** In Workshop on balancing ecosystem values: Innovative experiments for sustainable forestry, Portland, Oregon, Edited by Charles Petersen and Douglas Maguire. USDA Forest Service, General Technical Report PNW-GTR-635. Portland, Oregon, pp. 175-186.
- Wittmer, H.U., B.N. McLellan, D.R. Seip, J.A. Young, T.A. Kinley, G.S. Watts and D.H. Hamilton. 2005. **Population dynamics of the endangered mountain ecotype of woodland caribou (*Rangifer tarandus caribou*) in British Columbia, Canada.** Canadian Journal of Zoology. 83: 407-418.
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- Spittlehouse, D.L. 2005. **Review of Global Climate Change and Human Impacts on Forest Ecosystems,** J. Puhe and B. Ulrich, Ecological Studies, Vol. 143, Springer, Berlin, 2001. Agric. For. Meteorol. 128: 132-133.
- Winkler, R.D., D.L. Spittlehouse, and D.L. Golding. 2005. **Measured differences in snow accumulation and melt among clearcut, juvenile, and mature forests in Southern British Columbia.** Hydrological Processes 19:51-62.
- Sanborn, P., R. Brockley, B. Mayer, M. Yan, and J. Prietzel. 2005. **Sulphur fertilization of lodgepole pine: a stable isotope tracer study (E.P. 886.15): establishment report.** B.C. Ministry of Forests, Victoria. Technical Report 020.
- Sanborn, P. and R. Brockley. 2005. **Sulphur deficiencies in lodgepole pine: occurrence, diagnosis, and treatment.** B.C. Ministry of Forests, Victoria. Extension Note 71.
- Densmore, N., J. Parminter and V. Stevens. 2005. **Coarse woody debris: inventory, decay modelling, and management implications in three biogeoclimatic zones.** BC Journal of Ecosystems and Management 5(2):14-29.
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- Amponsah, I.G., P.G. Comeau, R.P. Brockley, and V.J. Lieffers. 2005. **Effects of repeated fertilization on needle longevity, foliar nutrition, effective leaf area**

index, and growth characteristics of lodgepole pine in interior British Columbia, Canada. Can. J. For. Res. 35:440-451.

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- Spittlehouse, D.L. and R.D. Winkler. 2004. **Snowmelt in a forest and clearcut.** Proceedings 72nd Western Snow Conference, Vancouver, B.C.
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- Nigh, G.D. 2004. **Growth intercept and site series-based estimates of site index for white spruce in the Boreal White and Black Spruce biogeoclimatic zone.** Res. Br., B.C. Min. For., Victoria, B.C. Tech. Rep. 13.
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Appendix 4: Developing A Framework For Guidance Documents

Prepared for the Ministry of Forests and Range
and the Ministry of Environment
(December 2005)

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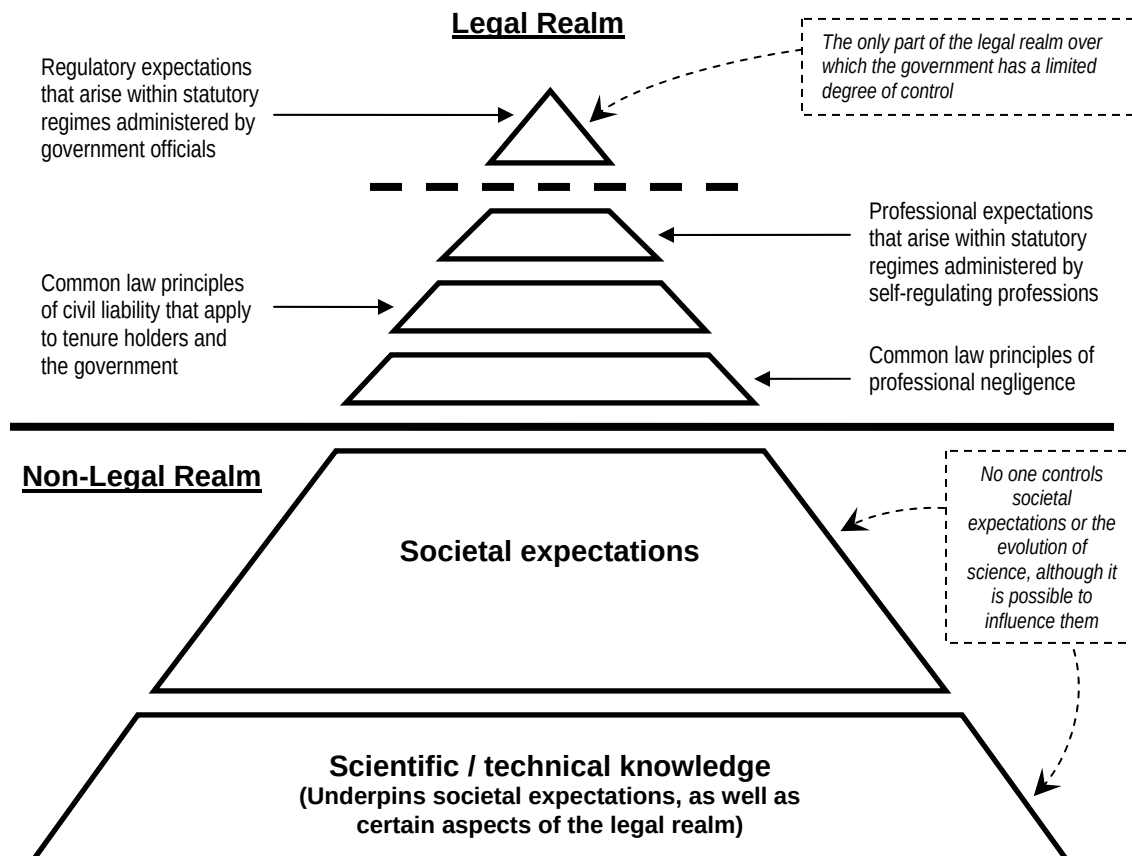
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Developing A Framework For Guidance Documents

Introduction

Guidance documents cannot dictate or control a person's actions or decisions. However, a good guidance document can describe, and in some cases even shape, the expectations that are likely to affect that person's actions or decisions.

In this context, it is important to remember that all that the government can actually **control**, and then only to a limited degree, is the expectations that arise in the topmost tip of the legal realm, i.e. within statutory regimes administered by government officials. In contrast, no one controls the non-legal realm of societal expectations. Having said this, anyone – including the government – can contribute to the debates that arise in the non-legal realm. Which means that the government – like anyone else – may be able to **influence** societal expectations.



Even within statutory regimes administered by government officials, the expectations of these officials are far from being the only, or even the most important, expectations that are likely to affect a person's actions or decisions. ***The government's control over the expectations that arise within statutory regimes is largely confined to enacting the legislation that creates these regimes.***

The interpretation of legislation is governed by statutory interpretation principles, which are laid down by the Courts. These principles are used to determine the expectations that matter most within any statutory regime, namely the expectations of the Legislature, commonly referred to as the “will of the Legislature.”

The acts of government officials charged with administering statutory regimes are also governed by administrative law principles. Like statutory interpretation principles, administrative law principles are laid down by the Courts. They create additional expectations, which protect those who are likely to be affected by the exercise of governmental powers. One of the most important expectations created by administrative law principles is the expectation of a fair and open process leading up to a statutory decision.

A government official’s compliance with administrative law principles – as well as the official’s interpretation of the applicable legislation – is subject to review by the Courts (via judicial review) and by appellate tribunals (if the legislation provides for appeals). All of which means that the expectations of government officials are subordinate to the expectations of the Legislature and the Courts.

Once we move outside statutory regimes administered by government officials, the expectations of these officials become even less important. Indeed, they are largely irrelevant. The government does not control the common law world, which governs things like civil liability, nor does the government control the statutory regimes that are administered by the self-regulating professions.

Finally, the government does not control the non-legal realm of societal expectations. It would be a serious mistake to assume that societal expectations do not matter, simply because they fall within the non-legal realm. The legal realm does **not** delimit the expectations that matter. That has never been the function of the law. The truth is that the law is only capable of addressing certain kinds of expectations and incapable of addressing others. This does not mean the expectations that the law cannot address are unimportant.

When it comes to evaluating decisions respecting the management of public forest and range lands in B.C., societal expectations are likely to play a role that is as important as, if not more important than, the expectations that arise within the statutory regimes created by Acts like the *Forest and Range Practices Act* (the FRPA).

Which brings us to the following question: What can guidance documents accomplish if the government has only limited control over the expectations that arise inside statutory regimes administered by government officials, and no control at all over the expectations that arise outside these regimes?

The short answer is that guidance documents can **explain** and sometimes **influence** expectations, including those that affect decisions made by tenure holders and government officials respecting the management of public forest and range lands in B.C. For this reason, the “evidentiary value” of guidance documents should never be overlooked. They

often reflect our best understanding of what is required – or what might one day be required – to meet expectations arising inside the legal realm, not to mention those that arise outside. This holds true for all guidance documents, regardless of whether they are developed by or on behalf of the government or outside of government.¹²

Unfortunately, badly written guidance documents, and even well written guidance documents that are badly used, can be worse than no guidance at all. The most common mistake is confusing guidance with direction.

Distinguishing guidance from direction

The government can only give directions to a person if it has been given authority over that person. If the government has the requisite authority, then the source of that authority can and should be identified. In the case of statutory decision-makers (SDMs), normal reporting relationships do not apply. This means that the authority that Ministers and senior government officials normally have over subordinate government officials, by virtue of the government's employment relationship with the latter, does not extend to SDMs (at least insofar as their role and their responsibilities as SDMs are concerned).

This holds true for SDMs expressly referred to by name or title in an Act or regulation, as well as for delegated decision-makers (DDMs), if the legislation provides for delegation. SDMs, including DDMs, take their directions from the legislation that creates their powers and duties, as well as from applicable legal principles laid down by the Courts. In effect, they “report” to the Legislature. Which means that clear statutory authority, such as that provided by section 2 (2) of the FRPA, is needed to empower anyone other than the Legislature or the Courts to give directions to SDMs, including DDMs.

Clear statutory authority is also needed before the government or a government official can give directions to a member of the public, such as a forest or range tenure holder. As the following passage from a B.C. Court of Appeal case illustrates, if the government or a government official cannot clearly show the “legal pedigree” for an act (including the giving of directions) that affects a person's rights, duties or liberties, then that act will be invalidated by the Courts, which means it can be safely disregarded:

Every act of governmental power, i.e. every act which affects the legal rights, duties or liberties of any person, must be shown to have a ***strictly legal pedigree***. The affected person may always resort to the courts of law, and if the legal pedigree is not found to be perfectly in order the Court will invalidate the act, which [the person] can then safely disregard. [Emphasis added]¹³

¹² For example, while professional associations can control professional expectations, at least to some degree, through the use of rules or bylaws, they may actually accomplish more through well-crafted guidance documents that seek to explain or influence, rather than control.

¹³ *Pharmaceutical Manufacturers Association of Canada v. Attorney General of B.C.* (B.C.C.A. CA022066, Vancouver Registry, August 19, 1997), quoting from Wade and Forsythe, *Administrative Law*.

The FRPA provides the requisite legal pedigree for certain kinds of directions to forest and range tenure holders. These directions normally take the form of “orders.” The authority for an order can always be identified by referring to the applicable section of the FRPA.

If you are a government official and the FRPA or another enactment does **not** give you authority over an SDM (or DDM) or a tenure holder, then you have no right to expect their obedience. In which case, all you can do is to provide guidance.

In this regard, government officials who have not been expressly empowered to give directions to SDMs (or DDMs) or tenure holders are in much the same position as everyone else. Very few people have the authority to give other people directions. In most cases, all any of us can do is to provide guidance, which can take the form of:

- **Information** that is useful to a person when that person is making a decision or carrying out an action; or
- **Advice** that helps a person figure out how best to go about making a decision or carrying out an action.

When providing guidance, you need to accept that ***your audience has the right to ignore your information or advice***, and they might well choose to ignore it. Indeed, if your guidance does not have ***intrinsic merit***, then it probably should be ignored. Whether or not your guidance is perceived as having merit will depend on whether:

- You have ***personal credibility*** with your audience (you cannot rely on your office, position or title to lend weight to your guidance); and
- Your guidance is ***compelling*** and ***persuasive*** in its own right (your audience must choose to follow it because it makes sense to do so).

This holds true for guidance documents developed outside of government, as well as for guidance documents developed by or on behalf of the government.

Things to think about when developing **any** guidance document

All guidance documents, regardless of whether they are developed by or on behalf of the government or outside of government, have the following steps in common.

Step 1: Clarifying the context for your message and deciding whether to proceed

Before you develop a guidance document, ask yourself four questions:

1. Who is the intended audience for the message that I want to convey?
2. Why is this message important to my audience?
3. Am I the right person to convey this message?
4. Where does the message fit within the legal or non-legal realm?

It is not enough that the message you want to convey is important to you. If it is not important to your audience, then it is unlikely to influence their thoughts, decisions or actions. In short, you not only need to have a specific audience in mind, you also need to know how your message is related to the issues and concerns that matter to this audience.

Once you have your audience clearly in mind, there still remains the question of whether or not you are the right person to “speak” to this audience. Do you have the right qualifications or credentials, as well as the necessary credibility, to address the issues or concerns that matter to this audience?

Finally, you need to place your message in its proper context, so that its relevance is clearly understood. Are you trying to explain or influence expectations that arise *inside* statutory regimes administered by government officials or *outside*? Are you trying to explain or influence expectations that arise within *another part of the legal realm*, such as the common law world of civil liability or the statutory regimes administered by the self-regulating professions? Are you trying to explain or influence expectations that arise within the *non-legal realm* of societal expectations?

Do not simply assume that your audience will be able to deduce the relevance of your message. You will need to be able to explain its relevance.

Step 2: Bringing the right expertise to bear on the issues

When all four of the foregoing questions have been satisfactorily answered, there is still another challenge that has to be met. Your message needs to be compelling and persuasive. To that end, it is essential that the right expertise be brought into play.

However, in many cases, the author of a guidance document is not an expert with respect to all matters addressed in the document. This is especially true of a guidance document that is a *synthesis* of the knowledge or opinions of a variety of experts.¹⁴

For example, a guidance document dealing with an issue that arises within the context of the statutory regime created by the FRPA may draw on both:

- The expertise of a lawyer well versed in the application of statutory interpretation and administrative law principles; and
- The expertise of a variety of different forest or range management experts, including professional foresters, professional biologists, agrologists, professional engineers, and professional geoscientists.

If the author of a guidance document is a “synthesizer” of the knowledge and opinions of various experts, then it is the author’s responsibility to ensure that the right expertise has been brought to bear on the issues addressed in the document.

¹⁴ Academic texts and government guidebooks are both examples of “synthesis” guidance documents.

Step 3: Validating your message

The next step – and arguably the most important one – is to have the guidance document reviewed by experts who were **not** involved in its development. This provides independent **validation** of the document’s message.¹⁵ Without such validation, your guidance may well lack credibility. In this context, it is important to remember that the goal of validation is not to ensure that people “like” the message in your guidance document. Validation is not a popularity contest and your guidance should not be subjected to any kind of negotiation.

To put it another way, knowledge is **not** the product of **consensus**. It is the product of thoughtful **inquiry** and **analysis**. A good guidance document is simply the summation of such inquiry and analysis. Validation provides a means of assessing whether this summation is accurate, well-reasoned and reliable.

Step 4: Adapting form to complement substance

Finally, if your message is to be compelling and persuasive, you will need to ensure that the form it takes complements its substance. In short, **how** you say something can be as important as **what** you have to say. In order to present your message effectively, pay particular attention to:

- Refining your message; and
- Selecting the right medium for this message.

Refining the message

It takes time and effort to craft a compelling and persuasive guidance document. Finding the right tone can be particularly difficult. You may find it helpful to keep asking the following questions as you draft – and re-draft – your guidance document:

- Have I respected my audience? Have I focused on their issues and concerns?
- Does my assessment of the facts hold up?
- If I am making assumptions, are they clearly identified as such and are my reasons for making them compelling?
- Have I clearly articulated the principles that underlie my analysis?
- Is my analysis complete?
- Have I identified relevant source materials, e.g. by adding references, citations, bibliographies, etc.?
- Are my arguments logically presented? Have I addressed everything that my audience is entitled to know? Have I identified gaps, counterarguments, alternatives, etc.?

¹⁵ When it comes to scientific/technical guidance, the table in the Attachment on p. 328 provides a useful framework for validating this particular type of guidance.

- Is my advice cogent? Does it make sense? Is it likely to be persuasive, or at least difficult to discount or ignore? Will it stand up under the scrutiny of acknowledged experts or my professional peers?
- Is the style and tone reflective of the fact that I am providing guidance and not direction? Have I made my purpose and the relevance of my guidance clear? Have I managed to avoid words like “shall” and “must” (unless they refer to a mandatory legal requirement)? Have I managed to use words like “should” sparingly?

Choosing an appropriate medium

Choosing an appropriate medium essentially comes down to selecting the right form of communication for your message. To that end, you need to consider how your audience is likely to respond to the form of communication you select.

Some Common Forms Of Communication

Form of communication	Audience Response: SDMs (including DDMs)	Audience Response: Government professionals who support SDMs	Audience Response: Tenure holders	Audience Response: Professionals who advise or assist tenure holders
Memorandum or letter from a Minister or Deputy Minister The reference to the Minister in s. 2 (2) of the FRPA also includes the Deputy Minister: see s. 23 (1) of the <i>Interpretation Act</i>	Normal reporting relationships do not apply to SDMs. A Minister or Deputy Minister cannot give directions to SDMs without express statutory authority. Section 2 (2) of the FRPA provides such authority vis-à-vis DDMs. Any communications to DDMs from the Minister or Deputy Minister could constitute binding direction. If the intent is simply to provide guidance, then a different medium is preferable.	The response from professionals who advise and support SDMs will depend on the response from the SDMs themselves. See comments for SDMs.	Without authority, no one in government can give directions to tenure holders. Directions are normally conveyed through “orders” provided for in legislation. Directions to DDMs will also affect tenure holders. If the intent is simply to provide guidance, then a different medium is preferable. Since guidance is not binding, its usefulness will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.	Government officials generally do not have the authority to give directions to the professionals who advise or assist tenure holders. Such “orders” as are authorized by the FRPA are normally issued to the tenure holders themselves. Most communications to professionals will simply be guidance. Since guidance is not binding, its usefulness will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.
Memorandum or letter from an Assistant Deputy Minister or another government official	Normal reporting relationships do not apply to SDMs. Under FRPA, only the Minister or Deputy Minister can give directions to DDMs. Communications from other government officials, including ADMs, could be construed as an attempt to improperly influence statutory decisions. If the intent is simply to provide guidance, then a different medium is preferable.	The response from professionals who advise and support SDMs will depend on the response from the SDMs themselves. See comments for SDMs.	See comments above re. communications from the Minister or Deputy Minister.	See comments above re. communications from the Minister or Deputy Minister.

Form of communication	Audience Response: SDMs (including DDMs)	Audience Response: Government professionals who support SDMs	Audience Response: Tenure holders	Audience Response: Professionals who advise or assist tenure holders
Interpretation Bulletins	The goal is to use statutory interpretation principles to predict as accurately as possible how the Courts will interpret the legislation, keeping in mind that they are the final arbiters of its meaning. An interpretation bulletin is only guidance, not direction. Its usefulness will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.	The response from professionals who advise and support SDMs will depend on the response from the SDMs themselves. See comments for SDMs.	Same as for SDMs.	Same as for SDMs.
Policies and procedures developed by or for SDMs, including DDMs A true policy deals with substantive matters (principles). A true procedure sets out a process, but does not touch on substantive matters	The goal of an SDM policy is to describe the <u>guiding principles</u> that are likely to influence an SDM's decision. Before SDMs rely on a policy, it must be made public. It is non-binding and SDMs must keep an open mind, unless they are DDMs under FRPA and the policy qualifies as direction from the Minister or Deputy Minister. The goal of an SDM procedure is to provide a fair and open <u>process</u> . Unlike policies, procedures are normally binding, if they are relied on by tenure holders or other members of the public.	Professionals who advise and support SDMs need to be familiar with SDM policies in order to: (1) provide advice to SDMs on their implications in a particular situation; and (2) identify situations in which it might be appropriate for an SDM to depart from a non-binding policy. Professionals who advise and support SDMs should strictly follow SDM procedures, if they are relied on by tenure holders or other members of the public.	A tenure holder has the <u>right</u> to try to persuade an SDM to depart from a policy, unless the SDM is a DDM under FRPA and the policy qualifies as binding direction from the Minister or Deputy Minister. If a tenure holder cannot persuade an SDM to depart from a policy, then the prudent course is either to follow the policy or to challenge the SDM's decision via an appeal or judicial review. Tenure holders also have the <u>right</u> to rely on SDM procedures, if they so choose.	Professionals who advise or assist tenure holders need to be familiar with SDM policies in order to: (1) provide advice to a tenure holder on their implications in a particular situation; (2) identify situations in which a tenure holder might want to try to persuade an SDM to depart from a non-binding policy; and (3) advise a tenure holder on how best to present their case. Professionals should also know how to make good use of SDM procedures.
Government policies and procedures that are <u>not</u> developed for SDMs	N/A. See comments above re. policies and procedures developed for SDMs. NOTE: Government policies and procedures are normally binding on all government staff, but SDMs are an exception to this general rule, at least with respect to policies, as they "report" directly to the Legislature. See comments above re. procedures.	N/A – at least with respect to the advice and support they provide to SDMs. See comments above re. policies and procedures developed for SDMs.	N/A – unless cited in legislation or a contract. Otherwise, government policies and procedures are internal government communications, which can be ignored by tenure holders. If the intent is to provide guidance, then a different medium is preferable.	Same as for tenure holders.

Form of communication	Audience Response: SDMs (including DDMs)	Audience Response: Government professionals who support SDMs	Audience Response: Tenure holders	Audience Response: Professionals who advise or assist tenure holders
Internal government guidance * Advice, support and training offered to SDMs and the professionals who advise and support them	Can be useful to SDMs. Since guidance is not binding, whether or not it really is useful will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.	The response from professionals who advise and support SDMs will depend on the response from the SDMs themselves. See comments for SDMs.	N/A – Tenure holders are not the audience for internal government guidance. *	N/A – Professionals who advise or assist tenure holders are not the audience for internal government guidance. *
External extension Services * Advice, training, assistance and other forms of guidance offered to tenure holders by the government re. issues falling inside statutory regimes	N/A – SDMs are not the audience for extension services. *	N/A – Professionals who advise and support SDMs are not the audience for extension service. *	True extension services are: (1) a genuine offer of assistance rather than a covert attempt at control; (2) tailored to the needs of tenure holders; and (3) useful, compelling and persuasive. Since these services are only guidance, they are not binding. Their efficacy is dependent on their intrinsic merit.	Same as for tenure holders.
Standards of conduct and competence established by self-regulating professions Set by professional associations through rules, bylaws or resolutions that are binding on their members	N/A – unless SDMs are also professionals. If they are, these standards qualify as directions and may require additional rigour with respect to the analysis they bring to bear on their statutory decisions. However, the legislation that governs their decisions will remain their primary consideration.	These standards qualify as directions and may require additional rigour with respect to the advice and support professionals provide to an SDM. However, the legislation governing the SDM's decision will remain their primary consideration.	N/A – unless tenure holders are also professionals. If they are, see comments for professionals who advise or assist tenure holders.	These standards qualify as directions and may require additional rigour with respect to the advice or assistance professionals provide to tenure holders. Unlike SDMs, these professionals do have to look beyond statutory regimes administered by government officials.
Guidance from professional associations Advisory bulletins, guidelines, guidebooks, handbooks, and other forms of non-binding advice, training and support offered to members re. matters touching on their profession	Can be useful if it is relevant to a statutory decision that an SDM is charged with making. Issues falling outside statutory regimes administered by government officials will not normally be relevant. Since guidance is not binding, whether or not it really is useful will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.	Same as for SDMs.	See comments for professionals who advise or assist tenure holders.	Professionals who advise or assist tenure holders are likely to benefit as much or more from guidance respecting issues falling outside statutory regimes administered by government officials as inside. Since guidance is not binding, whether or not it really is useful will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive.

* Internal government guidance and external extension services can sometimes be **combined**, as in **joint training** initiatives.

Form of communication	Audience Response: SDMs (including DDMs)	Audience Response: Government professionals who support SDMs	Audience Response: Tenure holders	Audience Response: Professionals who advise or assist tenure holders
Scientific / technical guidance, including journals, texts, and other publications May touch on issues falling inside or outside statutory regimes administered by government officials	Can be useful if it is relevant to a statutory decision that an SDM is charged with making. Since guidance is not binding, whether or not it really is useful will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive. This holds true for government publications and private sector publications alike.	Same as for SDMs.	All such information can be relevant and useful to tenure holders. Since guidance is not binding, whether or not it really is useful will depend on its intrinsic merit. Guidance can and probably should be ignored if it is not compelling and persuasive. This holds true for government publications and private sector publications alike.	Same as for tenure holders.

Guidance documents dealing with issues falling **inside** statutory regimes administered by government officials

Government communications that provide guidance respecting issues falling inside statutory regimes administered by government officials come in four basic forms:

1. Interpretation bulletins;
2. SDM policies;
3. **External** “extension services” for clients outside of government; and
4. **Internal** guidance for SDMs and other government staff.

Interpretation bulletins

The function of an interpretation bulletin is to help its intended audience to resolve a **statutory interpretation problem** by using applicable interpretation principles to predict as accurately as possible how the Courts will interpret the legislation. In this regard, it is important to remember that the Courts are the final arbiters of the legislation’s meaning.

Of course, if the meaning of a particular provision can be easily determined simply by reading it, then there is no need for a bulletin. There is little to be gained from restating what the legislation already says clearly enough. By the same token, an interpretation bulletin cannot be used to put a particular “spin” on the words used in legislation in order to give them a more “convenient” meaning. An interpretation bulletin that fails to properly apply statutory interpretation principles is unlikely to withstand the scrutiny of the Courts. However, if there is some doubt as to the legislation’s meaning, and statutory interpretation principles are properly applied, then an interpretation bulletin can be very useful guidance.

SDM policies

An SDM policy is a set of **guiding principles**, which inform and influence an SDM's analysis of the kinds of issues that normally arise in the context of a particular type of statutory decision. This is assuming the statutory decision entails the exercise of **judgment** or **discretion**. If it does, then guiding principles can assist the SDM in deciding what to do in a reasoned and consistent manner. If it doesn't, then it isn't really a decision and guiding principles are unnecessary.

An SDM policy may be developed by the SDM, or it may be developed on the SDM's behalf by someone else in government. If the latter is the case, then the policy will need to be accepted or "endorsed" by the SDM (unless it qualifies as a binding direction, as discussed below). Either way, the primary purpose of an SDM policy is **not** to tell those who are likely to be affected by an SDM's decision what the SDM expects of them; **it is to tell them what they can expect of the SDM with respect to the SDM's analysis of the issues**. For this reason, SDMs cannot rely on a policy unless they first make it public.

In addition, **unless the legislation** governing a statutory decision **expressly provides otherwise**, an SDM policy must be **non-binding**.¹⁶ This includes policies that apply to DDMs under the FRPA, unless the Minister or Deputy Minister exercises the authority conferred on them under section 2 (2) of the FRPA to **transform** an SDM policy into **binding direction**.

In the absence of binding direction from the Minister or Deputy Minister, DDMs, like other SDMs, must keep an open mind. Specifically, they must be ready and willing to consider arguments in favour of **not** following an SDM policy, if such arguments are presented for their consideration by a person who is likely to be affected by their decisions. Of course, this does not mean that SDMs will necessarily be persuaded by such arguments. However, they must at least remain open to persuasion if the arguments appear to have merit.

The foregoing discussion reflects one of the **most basic principles of administrative law**, which is expressly designed to ensure that the expectation of a fair and open process leading up to a statutory decision is met. In this context, the distinction between "policies" and "procedures" is an important one.

A procedure is a process or a method. For SDMs, a procedure sets out the steps that they should follow before (and in some cases after) making a statutory decision, but does not actually address the substance of the decision itself. Unlike a policy, **a procedure can be binding** on an SDM, if it has been relied upon by a tenure holder or another person who is likely to be affected by a statutory decision. Indeed, the legislation governing a

¹⁶ An example of a binding SDM policy can be found in section 105 of the *Forest Act*, which applies to stumpage rate determinations. A binding policy is essentially a form of direction. Of course, any policy, whether it is binding or non-binding, as well as any form of direction, has to be consistent with the applicable legislation. No policy or direction can ever wrest control from the Legislature by altering the meaning of legislation or overriding its purpose.

statutory decision will often provide for binding procedures, such as timelines, hearings or “opportunities to be heard.” However, procedures developed by government officials, outside of the legislation, can be just as binding on SDMs. As noted above, the same does **not** hold true for policies.

Extension services for clients outside of government

Extension services are advice, training or technical assistance offered by the government to a particular client base outside of government, i.e. to those in the private sector, such as tenure holders, who turn to the government for such services.

Extension services are usually restricted to matters falling inside statutory regimes administered by government officials. To qualify as true extension services, a guidance document must be a genuine offer of assistance, rather than a covert attempt at control. The goal is to help those who are subject to or affected by a statutory regime to successfully navigate their way through this regime. To that end, government staff who provide extension services need to pay as much attention to the **rights** of a person who relies on their guidance as they do to that person’s **obligations**.

Internal government guidance for SDMs and other government staff

Like extension services, advice and support offered to government staff, including in particular SDMs, must be a genuine offer of assistance, rather than a covert attempt at control. In this case, the goal is to help SDMs – and government staff charged with advising and supporting SDMs – to successfully navigate their way through complex statutory decisions.

The challenge for government staff who provide advice or support to SDMs is two-fold. First, it is essential that the role of advisor or “information-provider” is clearly separated from the role of decision-maker. Second, there is little point in providing advice or any other information to an SDM if it is not in a form that the SDM can use. To meet this two-fold challenge, government staff who develop guidance documents for SDMs, as well as government staff who provide day-to-day advice and support to SDMs, need to be thoroughly conversant with:

- The statutory provisions that govern the statutory decisions that an SDM is charged with making, as well as the statutory interpretation principles that are likely to determine the meaning of these provisions;
- The administrative law principles that govern the decision-making process; and
- The scientific/technical information and principles that are relevant to the issues that are likely to confront an SDM.

What do these different forms of guidance have in common?

Regardless of whether guidance documents prepared by or on behalf of the government take the form of interpretation bulletins, SDM policies, extension services, or internal

advice and support for SDMs, the development of these documents should follow the four basic steps set out earlier. While these steps are equally applicable to guidance documents developed outside of government, their importance for those developed by or on behalf of government cannot be overstated.

In addition, government staff may find it helpful to keep the following “don’ts” in mind:

- Don’t confuse public policy discussions or decisions with the requirements of the law, and don’t confuse either of these with objective scientific/technical information or analysis. For example, the government may choose, as a matter of public policy, to place a “cap” on the timber supply impact of a proposed government initiative, such as the establishment of wildlife habitat areas under the FRPA. If so, government staff charged with acting as scientific/technical advisors to a Minister cannot use science to override this public policy decision. However, this does not mean that they are obliged to come up with a scientific rationale or justification for what is purely a public policy matter. If you represent something as being science, it should not carry a public policy slant. In other words, if and when public policy and science are brought together in the same document, the science portion of the document should remain “pure.” The same holds true when legal requirements and public policy, or legal requirements and science, are discussed in the same document.
- Don’t assume that **your** interpretation of legislation is necessarily the only or the correct interpretation. Even if you were part of the public policy discussions leading up to its enactment, this doesn’t mean your interpretation of the legislation necessarily reflects its “true meaning.” Remember that the Courts are the final arbiters of the meaning of legislation, and they don’t care about the public policy discussions leading up to its enactment. What they do care about is the proper application of statutory interpretation principles.
- Don’t refer in passing to a legislative provision, without analyzing its meaning in accordance with statutory interpretation principles, simply to give the appearance of weight to your discussion of a particular issue. If you refer to a legislative provision, be thorough in your analysis of both its meaning and its implications.
- Don’t assume that the information or advice you provide is **automatically** relevant to an action or decision governed by a statutory regime, simply because it comes from someone in government. If it is relevant, take the time to explain its relevance.

In short, **make sure you know what you are talking about**, whether it is public policy, the law or science, and then **bring the right principles to bear** on your discussion of these issues. Above all, always strive to remain **impartial**, in keeping with the principle of neutrality that underpins the constitutional role of the public service.

Finally, it is important not to overlook the fact that private sector guidance may also deal with issues that arise inside statutory regimes administered by government officials. The government does not have a monopoly on providing such guidance. While private sector guidance is likely to be in a form that is different from the forms commonly used to convey government guidance, this will not impair its usefulness – assuming it is compelling and persuasive.

Guidance documents dealing with issues falling **outside** statutory regimes administered by government officials

Once we move outside statutory regimes administered by government officials, guidance documents can take many different forms, including both government and private sector publications. The potential topics are essentially unlimited. A guidance document might focus on the common law world of civil liability, or on the statutory regimes administered by the self-regulating professions. Or it might focus on the non-legal realm of societal expectations. Guidance documents dealing with the latter topic, in particular, could potentially have a significant impact on the management of public forest and range lands in B.C.

Indeed, when it comes to achieving high standards of environmental stewardship, expectations in the non-legal realm may accomplish far more than any statutory regime could hope to accomplish. Which raises an important question: Is it appropriate for the government or government staff to try to resolve or influence issues that arise solely within the non-legal realm?

The short answer is “Perhaps.”

If the government or government staff choose to address issues in the non-legal realm, then they should be prepared to do so on the same footing as everyone else. They cannot use their government status as a form of “leverage.”

Government staff at all levels, from the most senior to the most junior, need to be particularly careful in this regard. They can never presume to speak for the politicians who sit in the Legislature, nor can they use their proximity to these politicians, or their role as public policy or scientific/technical advisors to the government, to improperly influence a discussion or debate in the non-legal realm.

Currently, one of the most interesting of these debates concerns the question of what constitutes “best practices” or the use of “best available information” with respect to the management of public forest and range lands.¹⁷ In some cases, this question can be related to the common law world of civil liability. For example, the standard of care that applies in either an “ordinary” negligence action or a professional negligence action may well turn on what constitutes best practices or the use of best available information.

This question may also be relevant to standards of conduct and competence set by self-regulating professions. It may even be relevant to a DDM’s consideration of a result or strategy proposed in a forest stewardship plan, assuming the question has a direct bearing on the approval test set out in that section 16 of the FRPA. The question may also be relevant to the due diligence defence provided for under section 72 of the FRPA.

¹⁷ “Best available information,” sometimes referred to as “best available science,” essentially means scientific/technical information that meets appropriate evaluation or validation “tests,” such as those set out in the table found in the Attachment on p. 328.

In sum, best practices and the use of best available information may have a role to play within the legal realm outside of – and possibly even inside of – statutory regimes administered by government officials. Which means that the evidentiary value of guidance documents touching on these matters is not something to be lightly discounted.

However, in many cases, the relevance of best practices and best available information will be confined to the non-legal realm. If so, whether or not a guidance document touching on these matters is considered useful – or is used – by someone like a tenure holder is likely to depend on whether it reflects societal (as opposed to simply “government”) expectations. Hence the importance of the debate in the non-legal realm.

Government staff with the requisite expertise may choose, or may be asked, to contribute to this debate. If they do contribute, and they strictly adhere to the principle of neutrality that is the touchstone for every public servant, then they can potentially affect the non-legal realm by heightening our appreciation of key issues. In turn, this heightened appreciation may help to shape societal expectations.

Another debate that is likely to be of considerable interest to resource management professionals, regardless of whether they work inside or outside of government, relates to the following question: What is stewardship? To put it another way, what “values” does our society expect a steward of public forest and range lands to protect?

And yet another debate that is likely to absorb the attention of resource management professionals relates to the following question: What does it mean to be a professional?

In this context, the challenge for **all** resource management professionals, whether they work for the government or for a forest or range tenure holder, is distinguishing their own personal values and principles from the values and principles of their profession – and, in turn, distinguishing these values and principles from the values and principles of their client or employer. For a true professional, ***it is the values and principles of their profession that define who they are as a professional.***¹⁸

However, understanding what the values and principles of a particular profession actually mean – and the nature and extent of the societal and professional expectations they create – is not as simple as it might seem. Guidance documents – whether written by government professionals or private sector professionals or by the professional associations to which they belong – could play an important role in exploring exactly what it means to be a resource management professional.

¹⁸ Matters can become more complicated if a professional is a member of two or more professions. For example, a professional forester may also be a professional biologist – and vice versa. When this happens, professionals may be presented with circumstances that require them to find a way to **balance** competing values and principles of different professions. This possibility exists for **all** government professionals, since they will automatically be members of at least two professions. This is because the public service is itself a profession, and its most important values and principles form part of our constitution. Matters can also become even more complicated for government professionals if they happen to be statutory decision-makers, since their duty to the Legislature generally takes precedence over other considerations.

Again, it is important to remember that whether or not a guidance document is able to influence societal or professional expectations depends on its intrinsic merit, rather than its source. The extent to which the views of government staff, including professionals, succeed in shaping societal or professional expectations will depend solely on the merits of their opinions, the cogency of their arguments and the strength of the research or analysis that underpins their opinions. In other words, the contributions that the government or government staff make to debates in the non-legal realm will be useful only if these contributions are as compelling and persuasive as – or more compelling and persuasive than – other contributions to these debates.

Of course, this comment is equally applicable to the contributions made by those in the private sector, including in particular the resource management professionals who work for tenure holders.

In closing, let's consider six mistakes that are commonly made during the development of guidance documents.

Six common mistakes to avoid

1. Providing guidance without having the mandate to do so, i.e. not being the right person with the right qualifications and the necessary credibility.

Avoid this mistake by establishing your “pedigree” **before** providing any form of guidance. Why are you the right person to speak to this issue? Why should your audience listen to you? What are your qualifications or credentials? Have you been asked to provide this guidance?

2. Confusing office, position or title with credibility or authority (i.e. assuming the former automatically confer the latter).

Avoid this mistake by never assuming that your office, position or title automatically confers credibility or authority. If you have credibility, it will come from your expertise (or the expertise demonstrated in the source materials you have cited or referenced), rather than your office, position or title. If you have authority, you can identify its source. For government staff, avoiding this mistake also means avoiding the trap of assuming all government communications should be accepted as “gospel.”

3. Failing to think about what your audience needs, resulting in a message that is not persuasive.

Avoid this mistake by keeping your audience clearly in mind. Who are you speaking to and what issues or concerns are important to them? How will your message help them to address these issues or concerns?

4. Failing to distinguish between: (a) political decisions (public policy); (b) the requirements of the law; and (c) scientific/ technical information or analysis.

Avoid this mistake by clearly identifying when you are talking about a public policy decision, when you are talking about a legal requirement, and when you are providing

scientific/technical information or analysis. Remember that a public policy decision cannot override the law, anymore than science or technology can override a public policy decision or the law. However, it is equally important to remember that science has its own values, the most important of which is **objectivity**. Which means that valid scientific/technical advice or information should never be “slanted” by political considerations. When bringing scientific/technical information or analysis to bear on a public policy issue or a legal requirement, clearly identify the manner in which public policy or the law has influenced the **context** within which the scientific/technical information or analysis is presented. Do not create any confusion as to where public policy or the law ends and science begins.

5. Using the wrong tone or the wrong medium (form of communication) for the message.

Avoid this mistake by ensuring that the style, tone and form of communication you use, as well as the proposed method of distribution, sign-off protocols, etc. do not create the impression that your guidance is something more than it really is. In particular, avoid anything that suggests that your guidance is akin to direction or has some kind of quasi-legal status. Make it clear that you respect your audience’s right **not** to accept your guidance. And mean it.

6. Providing an incomplete or garbled message (e.g. no articulation of principles, partial information, an incomplete or one-sided analysis, logical inconsistencies, etc.), resulting in a message that is not persuasive.

Avoid this mistake by being meticulous in the presentation of information or advice. Ensure your guidance is logically presented and complete. Finally, ensure it has been properly validated.

By avoiding these six mistakes – and remembering that your audience can and probably should ignore your guidance if it is not compelling and persuasive – you can develop guidance documents that are not only **useful**, but are **actually used** and **used effectively**. In particular, when it comes to the management of public forest and range lands in B.C., **well-crafted** guidance documents could be an invaluable tool, whether they are developed by or on behalf of the government or outside of government.

* * * *

Attachment: Validating Scientific/Technical Guidance

The table below provides a useful framework for evaluating or validating almost any type of scientific/technical information or advice.¹⁹

SOURCE OF SCIENTIFIC INFORMATION	CHARACTERISTICS *					
	Peer Review	Methods	Logical conclusions & reasonable inferences	Quantitative analysis	Context	References
A. Research. Research data collected and analyzed as part of a controlled experiment (or other appropriate methodology) to test a specific hypothesis.	X	X	X	X	X	X
B. Monitoring. Monitoring data collected periodically over time to determine a resource trend or evaluate a management program.		X	X	y	X	X
C. Inventory. Inventory data collected from an entire population or population segment (e.g. individuals in a plant or animal species) or an entire ecosystem or ecosystem segment (e.g. the species in a particular wetland).		X	X	y	X	X
D. Survey. Survey data collected from a statistical sample from a population or ecosystem.		X	X	y	X	X
E. Modeling. Mathematical or symbolic simulation or representation of a natural system. Models generally are used to understand and explain occurrences that cannot be directly observed.	X	X	X	X	X	X
F. Assessment. Inspection and evaluation of site-specific information by a qualified scientific expert. An assessment may or may not involve collection of new data.		X	X		X	X
G. Synthesis. A comprehensive review and explanation of pertinent literature and other relevant existing knowledge by a qualified scientific expert.	X	X	X		X	X
H. Expert Opinion. Statement of a qualified scientific expert based on his or her best professional judgment and experience in the pertinent scientific discipline. The opinion may or may not be based on site-specific information.			X		X	X

X = Characteristic must be present for information derived to be considered scientifically valid and reliable

y = Presence of characteristic strengthens scientific validity and reliability of information derived, but is not essential to ensure scientific validity and reliability

* A description for each characteristic can be found on the next page.

¹⁹ This table is taken from Part 9 of Washington State's *Growth Management Act – Procedural Criteria for Adopting Comprehensive Plans and Development Regulations*. It provides a useful summary of the factors most commonly used to evaluate – or validate – scientific information. The table can be found at the following Internet link: <http://www.leg.wa.gov/WAC/index.cfm?section=365-195-905&fuseaction=section>.

Description of Characteristics of Scientific Information	
Peer review	The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The criticism of the peer reviewers has been addressed by the proponents of the information. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed.
Methods	The methods that were used to obtain the information are clearly stated and able to be replicated. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to assure their reliability and validity.
Logical conclusions & reasonable inferences	The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained.
Quantitative analysis	The data have been analyzed using appropriate statistical or quantitative methods.
Context	The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.
References	The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

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