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BC Resource Road Safety Initiative

Resource Road Radio Communications Protocol

Updated: November 28, 2013

Canada

BC's Resource Road Radio Communications Initiative

Why?

- **No consistency in signage, radio operator procedures or radio channels**
  - Coroner's inquest
  - Increased traffic on many resource roads
  - Increasingly mobile workforce
  - Need to fit more frequencies in already congested range

What?

- **Implementation Pilots & evaluations**

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BC Resource Road Initiative – Key Principles

- **Initiative started by FLNRO (BCTS), who brought together a team including IC, FPI and others**
- **Other key supporters:**
  - BC Forest Safety Council
  - TruckSafe
  - WorkSafe BC
- **IC is taking on a greater role given post pilot changes required**

BC's Resource Road Radio Communications Initiative – Pilot Projects

- Pilots conducted on FSRs in South Island, Campbell River, Sunshine Coast and Peace Forest Districts.
- Industrial & commercial resource road users and other misc. stakeholders
- Cooperation & collaboration of numerous resource companies in the local areas

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Radio Authority Matrix

- **Industry Canada is responsible for licensing use of radio frequencies**
- **FLNRO is responsible for authorizing the use of specific frequencies on FSRs**
- **Licensees are responsible for authorizing the use of specific frequencies on LOC roads**

Objectives of Pilots

1) Develop consensus and establish consistent radio calling procedures
2) Establish standards for consistent signage
3) Trial a group of standardized radio channels with potential to roll-out BC wide

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Pilot Evaluation - FPInnovations

- Surveyed 327 road users through Web-based questionnaires about signage, calling procedures and radio channels
- Additional 150 roadside interviews with those travelling resource roads in the Pilot areas
- Site visit to Chetwynd to investigate Pilot-related communication problems found several root issues
- Verified the effectiveness of the RR Channels through interview feedback and extensive field testing
- Project report summarizes key findings from the Pilots
- Creating best practice guidelines for radio equipment installation and maintenance, and for radio use

Radio initiative status

- **Pilots and evaluations completed and reported on project website**
- **RSCs established around BC**
- **Radio calling procedures introduced in 2009**
  - Up/ Down standardized
  - Calling order standardized
  - Default & local calling frequency

Standard FSR Signage

- Sign materials and format standardized
- Signs at road entry points identify road name to be called, RR channel and call frequency
- KM signs reflect calling procedure
- Must call KM signs, where needed

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Standardized RR Channels Adopted

- Resource Road (RR) Channel
  - **One frequency = one channel**

- 40 Std Channels
  - 35 RR channels
  - 5 LD loading channels
  - licensed to Prov. of BC

- Implementation requires IC to “clear” locally

RR Radio Communications Protocol Adoption

1. **Engage with major licensees, and other stakeholders to establish communication standards for defined area for buy-in**
2. **Identify and engage key stakeholders {eg. Road Safety Committee (RSC)}**
3. **Develop implementation plan**
4. **Communication is critical and key to success**
   - Identify other affected stakeholders
   - Inform staff and contractors, radio shops, and other resource road users (eg. first responders) of upcoming changes
   - Keep stakeholders informed on timing

Securing Buy-in from Key Stakeholders

- **Seek stakeholder support for:**
  - transitioning of piloted channels
  - standardizing procedures, signage and channels
- **Benefits and opportunities:**
  - Always having the correct radio channels available with no need to constantly reprogram
  - One less thing for workers, first responders, and the general public to worry about
  - Consistency and standards lead to operational efficiencies & simplified training, **and most importantly - increased safety**
- **Communication is Key !**

Transition steps include:

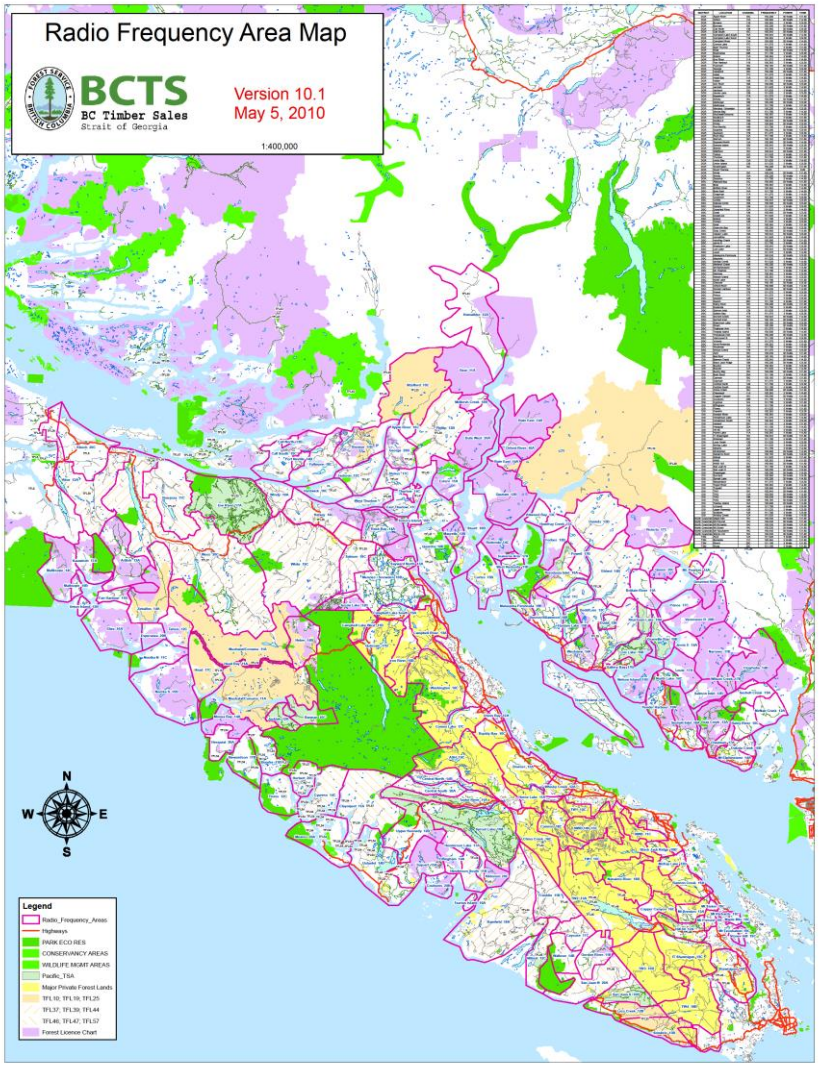
1. **Define area and determine transition date**
   - Consider engaging adjacent areas
   - Select low road activity time for transition
2. **IC free up RR frequencies in area (move current users off of RR channel frequencies)**
3. **Assign radio channels across the landscape (polygon map)**
   - Review road systems and streamline road names
   - Must be reviewed and approved by Industry Canada

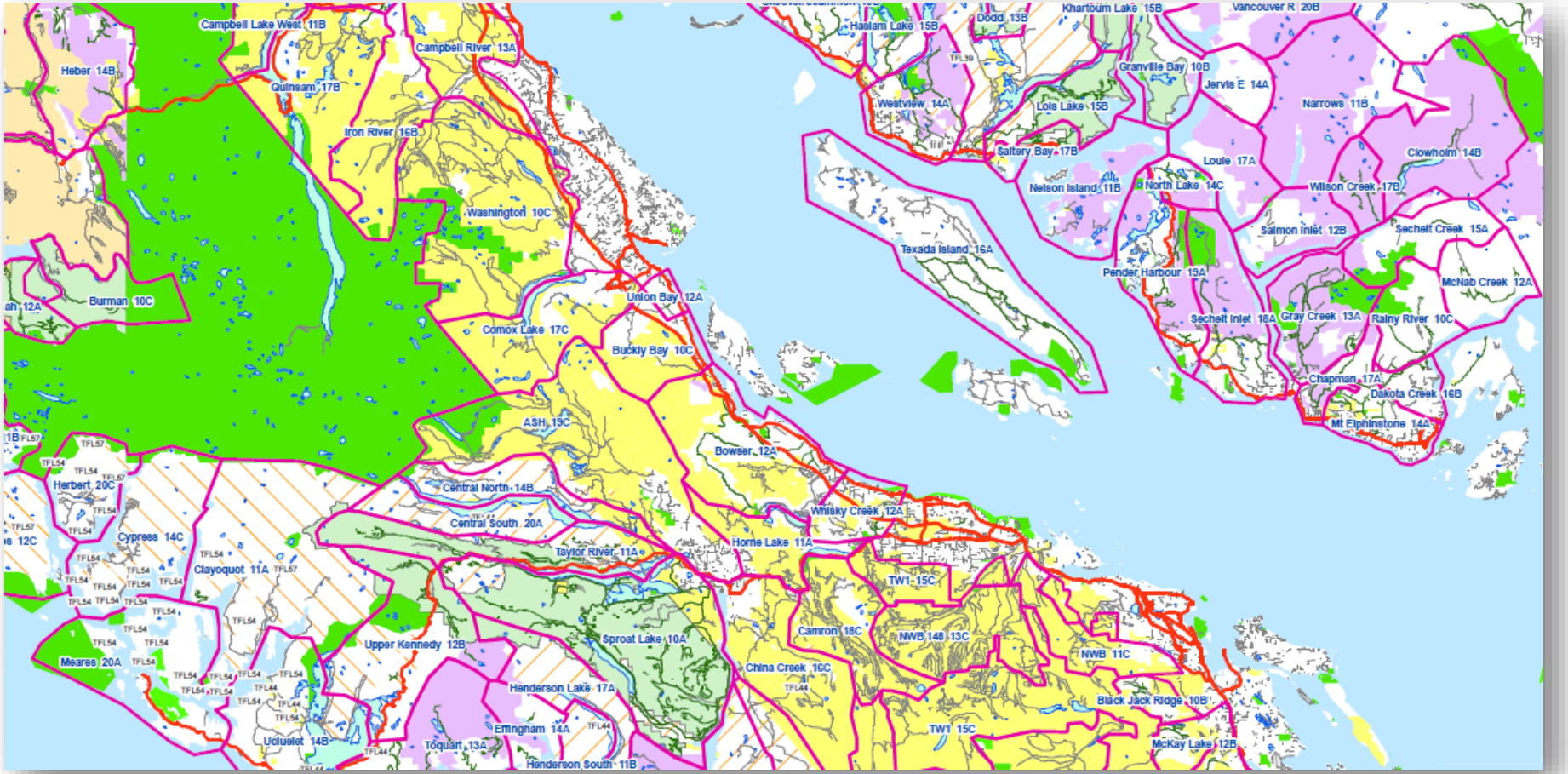
Transition steps include:

4. **Change signage on resource roads**
   - Entry road signs
   - RR channel signs
   - Must call signs
5. **Road users re-program radios with standard set of RR radio channels**
6. **Plan transition date activities**
   - Entry road signs
   - System to check users having right channels before entering road
   - Monitor conformance with new calling procedures

- **Coast - original piloted RR radio channel assignments map**

- **Map the land base with proposed channel polygons to avoid interference**





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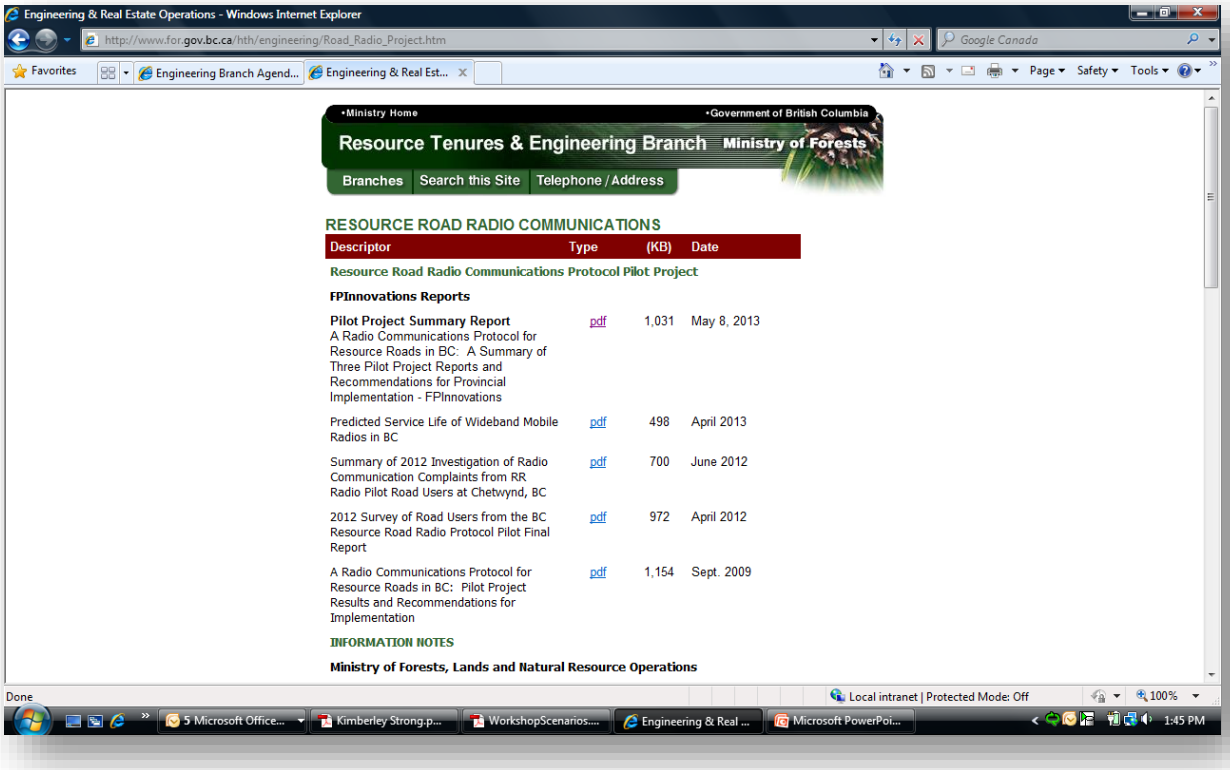
Further information:

- ***Go to RESOURCE ROAD RADIO COMMUNICATIONS at:***
  http://www.for.gov.bc.ca/hth/engineering/Road_Radio_Project.htm



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