



**Matthew H. Mead**  
Governor

# State of Wyoming

**William Westerfield**  
Chairman

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## Public Safety Communications Commission

October 25, 2011

The Honorable Matthew H. Mead  
Governor, State of Wyoming  
Capitol Building  
Cheyenne, WY 82002

Dear Governor Mead;

By Wyoming Statute 9-2-1104, the Wyoming Public Safety Communications Commission (PSCC) is to report, in writing each year in October, to the governor concerning any problems related to the installation, operation and maintenance of the statewide radio communications system. Attached is the annual report for October 2011, which includes the past year achievements, PSCC Organization, current activities, priorities for the next year, challenges and information on WyoLink usage.

If you have any further questions or comments, please feel free to contact me.

Respectfully,

A handwritten signature in cursive script that reads "Will: Westerfield".

William Westerfield, Chairman



Matthew H. Mead  
Governor

William Westerfield  
Chairman

# State of Wyoming

## Public Safety Communications Commission

### ~ 2011 Annual Report to the Governor of the State of Wyoming ~

#### Mission Statement and Statutory Responsibilities

The mission of the Wyoming Public Safety Communications Commission (PSCC) is to develop recommendations for policy and guidelines, identify technology and standards, and coordinate intergovernmental resources to facilitate statewide wireless communications interoperability with emphasis on public safety.

Wyoming Statute 9-2-1104 states the commission shall:

- (ii) **Report in writing each year in October to the governor concerning any problems related to the installation, operation and maintenance of the system and shall make any recommendations it deems appropriate as part of the report.**

#### Achievements for 2010 and 2011

The Public Safety Communications Commission (PSCC) and the WyoLink program have achieved many accomplishments and goals this past year:

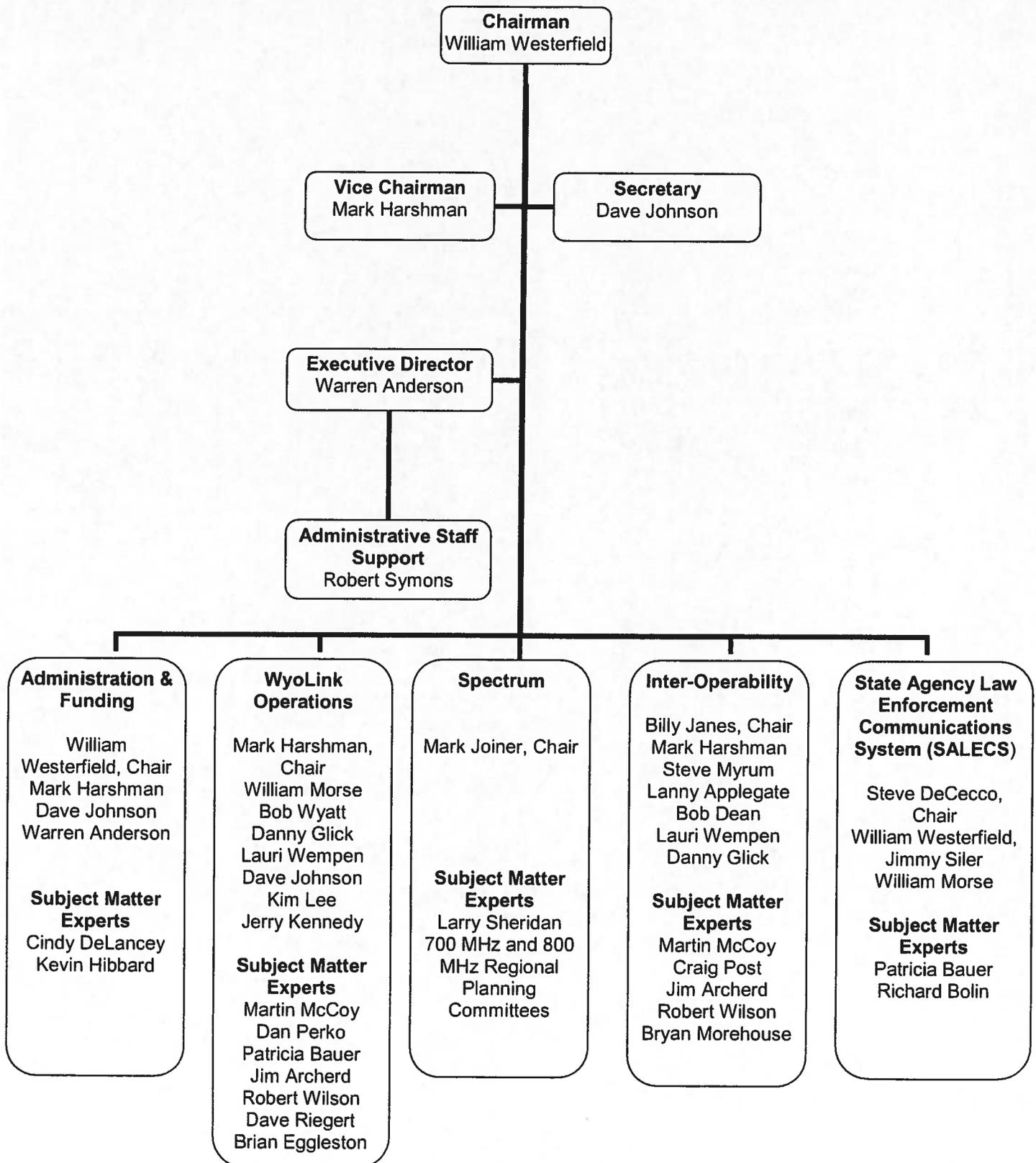
- 237 total WyoLink Membership Applications have been approved by the PSCC
- 11,265 subscriber units (console positions, mobile and portable radios) programmed and operable on WyoLink.
- Over 1 million radio calls per month have been logged by the WyoLink System.
- 51 of 57 core WyoLink radio sites have been activated and are operational
- Construction started on five additional core WyoLink sites.
- Portable Radio Coverage Enhancement Grants were reviewed for 15 localities and will be constructed in 2011 or 2012. Two Portable Radio Coverage Enhancement (PCE) sites (Laramie & Torrington) are operational. Construction is progressing on three PCE sites and engineering work has begun on an additional five PCE sites with construction completed late 2011 or early 2012.
- Natrona County and Casper 800 MHz system was upgraded to a WyoLink site and the Natrona County/Casper agencies are now operating on WyoLink with seamless interoperability with VHF users.
- Quarterly meetings were held in Evanston (March 2011) and three video conference meetings were held in December 2010, June 2011 and September 2011.
- WyoLink and Interoperable Communications end-user training programs were provided by the Wyoming Law Enforcement Academy and the Wyoming Fire Marshal's Office with grants provided by Wyoming Office of Homeland Security.
- During the spring and summer of 2011, many counties in Wyoming had to deal with significant spring snowmelt flooding and major wildland fires. During these incidents, local, state and federal agencies were able to use the WyoLink radio system to ensure

interoperable communications between response teams on the ground. This resulted in better radio communications which in turn assured a safer operation for all first responders.

### Commission Members and Operating Structure

The PSCC is comprised of representatives appointed by the Governor from the following public safety agencies, professional associations, and State departments:

Representing	Name	Location
Wyoming Police Chief's Association	Billy Janes, Police Chief	Torrington
Wyoming Sheriff's Association	Danny Glick, Sheriff	Laramie County
Division of Criminal Investigation, Office of the Attorney General	Steve Myrum, DCI Information Technology	Cheyenne
Wyoming Game and Fish Department	Steve DeCecco, Regional Wildlife Supervisor	Green River
Wyoming Department of Transportation	Captain William Morse, Wyoming Highway Patrol	Cheyenne
Wyoming Livestock Board	Jimmy Siler, Law Enforcement Administrator	Cheyenne
Department of State Parks and Cultural Resources	William Westerfield, Chief of Operations/Chief Ranger	Cheyenne
Wyoming Fire Chief's Association	Mark Harshman, Division Chief Casper Fire Department	Casper
Wyoming State Fire Marshal	Lanny Applegate, Director	Cheyenne
Wyoming Office of Homeland Security	Kim Lee, Operations Chief	Cheyenne
The Public at Large	Robert J. Wyatt, Attorney	Sheridan
Ambulance and Emergency Medical Services Organization	Lauri Wempen, Director Fremont County Ambulance	Riverton
Municipal Government or a municipal government association	Dave Johnson, Wyoming Association of Municipalities	Cheyenne
County Government or county government association	Jerry Kennedy, Albany County Commissioner	Rock River
Wyoming Department of Health	Robert Dean, Senior EMS Trainer	Cheyenne
Tribal Government or tribal government association	Vernon Hill, Wind River EMA Coordinator	Fort Washakie
Federal Government or federal government association	Mark Joiner, US Bureau of Land Management	Lander



**Wyoming PSCC Organization Chart**  
(Effective 10/31/2011)

## Activities

Ongoing projects include:

- Working through the guidelines of the *WyoLink Readiness Document* to assist agencies in preparing for WyoLink migration and to identify the agency *Relationship Manager*
- Refinement of WyoLink operations to deliver outstanding service and availability
- Portable Radio Coverage Enhancement program and site development
- WyoLink and Interoperable Communications training
- Publication of PSCC newsletters and updating PSCC and WyoLink policies and activities on the PSCC website at <http://pscc.wyoming.gov>

## Priorities for 2011

- Continue the emphasis on increasing utilization and partnerships
- Communication and collaboration with potential user agencies on WyoLink membership.
- Review and modification of WyoLink user training
- Monitor WyoLink system construction progress and activation of radio sites
- Work with the Wyoming Office of the Chief Information Officer (CIO) and *Link Wyoming* on studying public safety broadband usage and needs
- Provide support to the Wyoming Office of Homeland Security in the distribution of Federal interoperability funds to local authorities toward implementation of interoperable initiatives

## Challenges

### WyoLink Upgrades

The WyoLink public safety communications system is a computer software based integrated voice and data system. WyoLink primarily operates on very high frequency (VHF) band which can only pass data at 9600 baud. WyoLink's current 7.2 version of system, software and hardware support is drawing to a close and this will adversely affect the maintenance and operation of the system. As a computer system, installing the vendors system upgrades will keep the system current and add years to the life of the system. The vendor is currently supporting version 7.9 and planning to release version 7.11 in early 2012.

The Public Safety Communications Commission (PSCC) recommends funding the upgrade to Version 7.9 and fund a System Upgrade Agreement (SUA) which will include a major upgrade every two years. This upgrade will bring the WyoLink infrastructure up to the current version which is supportable, reliable and secure; and will improve future interface capabilities. The advantages to this upgrade include the ability to add WyoLink radio sites and dispatch consoles as necessary to increase capacity including the ability to add newer base radios which will extend the lifespan of the system. This upgrade will also allow for the use of Ethernet links between the system controllers, radio sites and dispatch consoles, reducing the annual leased T1 line expenses.

Without the upgrades, WyoLink will realize growth constraints and reduced reliability due to support difficulties. As the equipment becomes obsolete costs will increase and effectiveness of WyoLink support, repair and maintenance will decrease resulting in reduced reliability.

Entering into a System Upgrade Agreement (SUA) will keep the WyoLink infrastructure supportable, reliable, secure and current with Project 25 Technical Standards. The SUA will provide regular system upgrades to the WyoLink infrastructure. There may be some occasional additional hardware costs associated with these software upgrades, but the majority of them are included in the SUA.

### Coverage Enhancements

**Portable Coverage Enhancements** – The PSCC reviewed 15 grants from local jurisdictions for portable radio coverage enhancements in Thermopolis, Lander, Riverton, Laramie, Wheatland, Torrington, Campbell County, Sheridan, Douglas, Sweetwater County, Natrona County/Casper, Powell, Sundance, Worland, and Rawlins. The Wyoming Legislature has provided \$12,030,000 to fund expansion of the core WyoLink system for local responder portable coverage. The PSCC will be working with the local jurisdiction to identify potential grant funds that may be used to augment the Wyoming funds for additional sites.

Three enhancements have been completed in Natrona County/Casper, Laramie, and Torrington. Upon the completion of these portable coverage enhancements, the local public safety agencies have migrated their primary radio communications to WyoLink. An additional three sites are under construction in Thermopolis, Riverton and Lander with completion in November 2011. Site visits for development and engineering have been held in Rawlins, Wheatland, Douglas and Sheridan. Construction of these four sites will commence upon the approval of the engineering documents in the fourth quarter of 2011.

**WyoLink System Enhancements** - Upon the completion of the core WyoLink sites and the portable coverage enhancement sites, coverage testing and user experience may indicate additional areas for possible coverage expansions.

### WyoLink Usage

WyoLink usage by local, state and Federal agencies continues to experience significant growth, with 200% more calls in this reporting period. While this growth indicates the WyoLink system is exceeding expectations, there are many local and county agencies working on migrations plans to WyoLink. With this growth, the WyoLink Support Office and the PSCC must continue to monitor the system and be prepared to make changes to the operational protocols and radio discipline to improve upon the efficiency of the shared system.

With the reduction in Federal grants for training, the current WyoLink training plan must be reviewed and modified so that the end user training meets the needs of the users and the WyoLink system. There will be limited funding for training and those funds will need to be expended in an efficient manner to provide the required training. Most problems reported about the WyoLink system have been problems with the end users not having sufficient training and knowledge of operating on a shared trunked radio system.

## WyoLink Usage

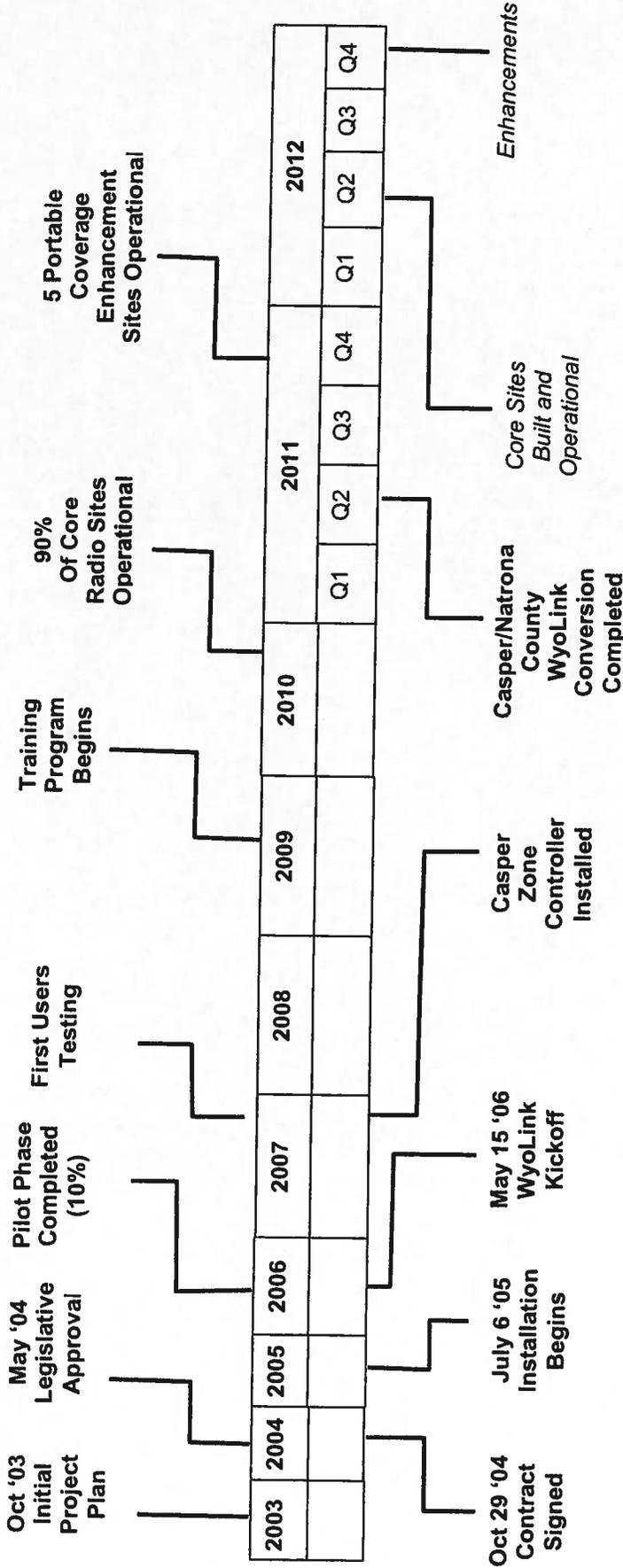
Current Reporting Period (October 2010 – September 2011)						
Month/Year	Calls	Duration hours:minutes:seconds	Average Voice Call Duration seconds	Percentage Buses Statewide	Busy Call Duration hours:minutes:seconds	Average Busy Wait seconds
Oct - 2010	703,381	2369:27:51	0:00:12	0.033%	0:10:44	0:00:03
Nov - 2010	880,214	3147:09:55	0:00:13	0.074%	0:28:45	0:00:03
Dec - 2010	903,475	3270:58:21	0:00:13	0.050%	0:19:10	0:00:03
Jan - 2011	972,726	3528:19:16	0:00:13	0.066%	0:32:21	0:00:03
Feb - 2011	965,635	3447:02:33	0:00:13	0.064%	0:30:56	0:00:03
Mar - 2011	932,349	3159:36:42	0:00:12	0.015%	0:08:18	0:00:04
Apr - 2011	779,066	2545:26:44	0:00:12	0.025%	0:06:13	0:00:02
May - 2011	1,073,996	3556:55:30	0:00:12	0.036%	0:17:13	0:00:03
June - 2011	1,090,634	3805:32:00	0:00:13	0.019%	0:06:22	0:00:02
July - 2011	1,126,095	3879:34:37	0:00:12	0.039%	0:13:24	0:00:02
Aug - 2011	1,198,048	4113:15:38	0:00:12	0.079%	0:47:15	0:00:03
Sept - 2011	1,138,680	3919:50:26	0:00:12	0.027%	0:10:14	0:00:02
<b>Oct 10 - Sept 11</b>	<b>11,764,299</b>	<b>40,743:09:33</b>	<b>0:00:12</b>	<b>0.044%</b>	<b>3:50:55</b>	<b>0:00:03</b>
Prior Reporting Periods						
Oct 09 - Sept 10	5,856,525	18,632:20:05	0:00:11	0.051%	3:02:12	0:00:04
Oct 08 - Sept 09	1,689,632	4,910:48:41	0:00:10	0.017%	0:17:30	0:00:04

WyoLink system usage growth (current reporting period to prior reporting period): **5,907,774 calls/ 200.88%** and duration increased by **22110:49:28** (hours:minutes:seconds)

**WyoLink Outages** – During the current reporting period, we had **452.6** critical outage hours out of a total possible system wide site hours of **442,344** for a critical availability percentage of **99.898%**. A critical outage occurs when more than 30% of individual site resources are not functioning. WyoLink users are encouraged to use the WyoLink 511 notify system for outage notification in their local area.



## Revised Estimated WyoLink Timeline



### WyoLink Development

Five core WyoLink sites are not constructed. Two sites – Salt Pass (Lincoln County) has a lease from the U.S. Forest Service and construction has begun. The construction of Hell Hole in Idaho (Lincoln County) and Duncan Lake (Sheridan County) are expected to be completed by the end of 2011. Wyoming is working with the U.S. Department of Interior on a possible radio site in Grand Teton National Park. The lease for Pow Wow (Northern Lincoln County) is completed with the Bridger Teton National Forest. The PSCC and WyoLink are working on frequency sharing plans with Federal agencies for two sites, Hellhole and Pinkham Mountain.

\*Enhancements – Additional sites for coverage improvements – One additional core site has been identified in the Elk Mountain (Carbon County) area for improved coverage along Interstate 80 and will be completed in 2011. Fifteen communities have been identified for portable radio coverage enhancement and will be completed in 2011 and 2012. Additional portable radio coverage enhancement sites may be identified upon the addition of grant funds provided by local jurisdictions.