

**FINAL REPORT OF THE  
XLI  
FIRE MANAGEMENT WORK GROUP  
MEETING  
NORTH AMERICA FOREST COMISION  
FAO**



Guadalajara, Jalisco, México  
September 24-28, 2007



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## 1. Meeting participants.

Gathered in the city of Guadalajara Jalisco, the delegations of Canada, United States of America, and México participated, having the USAID-USA Embassy in Mexico as special guest.

The detailed list is presented as follows:

### Canada.

Bill de Groot. Research Scientist. Canadian Forest Service.

Steve Roberts. Executive Director. Fire Management and Forest Protection – Saskatchewan.

Dennis Brown. Director. Canadian Interagency Forest Fire Centre.

Don Harrison. Executive Director. Fire Protection Branch, Sustainable Resource Development, State of Alberta.

### United States of America.

Tom Harbour. Director, Fire & Aviation Mgt. US Forest Service National Headquarters, Washington, D.C.

Dale Dague. Branch Chief International Fire. US Forest Service.

Mark Beighley. Director, Office of Wildland Fire. BLM. Department of the Interior, USA

Erin Small. Fire Planner. US Forest Service.

Isidoro Solís. Mexico Fire MGT Program Fire Training and Capacity Coordinator. US Forest Service

### México.

Vicente Arriaga Martínez. General Coordinator of Restoration and Conservation. CONAFOR

Roberto Martínez Domínguez. Forest Fire Protection Manager. CONAFOR

Juan Arturo Raygoza Martínez. Fire Prevention Assistant manager. CONAFOR

Juan Manuel Frausto Leyva. Fire Management and Restoration Program Manager. Nature Conservation Mexican Fund. Civil Association.

Dante Arturo Rodríguez Trejo. Professor – Researcher. Forest Sciences Division. Chapingo University.

José Germán Flores Garnica. Researcher. Forest, Agricultural and Cattle Researching National Institute.

Rossana Landa. Fire Manager and Restoration Program Assistant. Nature Conservation Mexican Fund.

Jaime Bocanegra Gallegos. Regional Manager of CONAFOR in Region V Lerma-Pacífico.

### Special Guests. US AID

Jorge Rickards. Natural Resources Advisor, Disaster Attention Assistant Director. USAID. USA Embassy Mexico City

Babette Prevot. Program Director. USAID. USA Embassy Mexico City

## 2. Opening.

### 2.1. Meeting Inauguration.

On September 24, at afternoon, a day before of the formal Meeting's Inauguration, it took place an informal meeting to welcome the meeting participants.

On September 25 the XLI Fire Management Working Group Meeting was formally inaugurated, being Vicente Arriaga, Conservation and Restoration General Coordinator, functioning as the chairman of the meeting, who addressed the welcoming words to the members of the Canada and United States of America delegations and inaugurated the Group's works.

As part of his Inauguration speech, the chairman in turn pointed out: "The milestone of the support received by Mexico is the year 1998, where important help was received mainly from the USA. Several lines of cooperation and collaboration were developed, among them an integrated study which will review México's capacity facing the handling of the emergencies caused by forest fires and, other, about the abilities development of the country on Fire Management matter".

"This supports were generated through a "Support Matrix", where it was possible to receive the help of the 7 million dollars order, from the USA".

"In 2003 Canada supported our country on the SFMS Development, on the system transference to Mexico, with the support of Canadian technicians..."

### 2.1. Meeting Inauguration.

Following the Agenda of the day and the Meeting was read.

## 3. First Session.

### 3.1. Dale Dague. WEB Site Updating of the Forest Fire Management Group Work (FMGW).

The 2006 Meeting Reports were added to the Web Site.

Notes of the meeting from several years have been added, and are already in the Web site but still they lack several years, as it is detailed in the document that was given. Erin Small will be the person in charge to receive information of those years from the members of the Group.

After 20005, relevant links were added with important agencies. If somebody wishes to add additional links please let us know, commented Dale.

After the activities section in the Web Site the members section is had, this is continually updated.

It is required that documents to be sent are not in Spanish or French, to keep the English navigation in the web site.

It is agreed the FMCN to do the contents translation that will be required.

Roberto was submitted information to Erin of the previous meetings. There is a lot of information on PDF. The list is in Spanish and two CD's are given to continue integrating the history of the Group .

It was suggested that before the meeting of the NAFC on March the effort for the WEB Site to be ready for that meeting, has to be made.

It was agreed that the main page of the Web Site has to contain the mission of the Group.

It was agreed that the participants will review the WEB page and that representants have to be named to coordinate with Dale Dague for modifications and additions.

It is agreed to let know the mechanism to add links from other WEB sites to this page.

It is agreed that the review from Mexico's part will be performed by Roberto Martinez Dominguez.

To the WEBMASTER on International Programs of US Forest Service, it will be asked about the rules and mechanisms to attach this information.

### 3.2. 4<sup>th</sup> International Wildland Fire Conference, Seville, Spain Report

- ❖ Description of the Australasia North America Regional Session.
- ❖ Presentation of the poster session.
- ❖ Presentation of equipment of organizations and those offered by vendors.
- ❖ Photos of the conference dinner.
- ❖ Cultural activities.

### 3.3 FAO's Fire Management Voluntary Guidelines: Principles and Strategic Actions. Rossana Landa.

#### Power point presentation (File Link).

Comments:

Presented the proposed strategy to improve the international cooperation on fire management.

For this, some voluntary guidelines have been emitted which describe what to do and how to do it: The contents of such guidelines, elements of the transversality, the principles and the guides.

The FMCN represents the civil society, and we have committed on the guidelines promotions, we have reviewed the final version, we are promoting the guides through the CAMAFU Web Site and we propose promotion actions of the guides through the CAMAFU Web Site and these documents printings made by the FAO on paper and CD.

It is intended to distribute from 500 to 1,000 copies of these documents, but the support of some institution is required to perform the diffusion of this document.

The CONAFOR commits itself to support on this aspect, simplifying these documents to make them reach more people, with adequate materials.

Such guidelines are generic and it is required to review the capacity of the completion of these guidelines and to generate an action route in each country.

### 3.4. FMWG draft articles for inclusion in "Crisis Response" and "Fire Management Today" Journals

- ❖ FMWG draft articles for inclusion in "Crisis Response" and "Fire Management Today" journals.

It will be presented a page to incorporate it to the "Crisis Response" and "Fire Management Today" journals. Already published information will be incorporated on the posters of the 41 Meeting of the Grup and information that the FMCN will present in two paragraphs about community participation on fire management, to be incorporated on both publications.

### 3.5. 2006 Minutes and Notes review, Dale Dague.

#### ❖ 2006 Minute and Notes Review.

It is required to incorporate a section developed by the CIFFC of Canada about the equipment use in 2006, which will be electronically submitted for its integration.

It is agreed the modification of the section 4 authority, to change the name of Dennis Brown for that of Kelvin Hirsch.

It is agreed to correct on the point 3 the name of German Flores instead of Juan Manuel Frausto.

### 3.6. Forest Fire Situation: Canada Report (Countries Reports) Dennis Brown ([File Link](#))

By the moment the fire season has not advanced much, that's why this presentation is just a draft which will be updated in december.

These are some of the previous comments to the presentation:

The fire season in Canada has increased in size in the time frame.

We have found that we have a higher intensity, needing great support and help from instances in and out of Canada. This has increased the costs, derived from a higher use of the resources for its control.

The number of fires has been reduced during this year, in comparison with the last 20 years. It was focused on the East, Ontario and Quebec. Some fires not as significant in the West.

The last comment is that the international agreements are necessary to move the international resources to face these problems together. We wish to review the agreement with the CONAFOR to see the future of this problem.

The Canadian fighters are required to prove a physical capacity for the fire activities. It is required to develop a standard of health for the fire fighters, which has to be covered by the forces that internationally support.

Question: The pests and diseases have contributed in some way to this problem?

Answer: Partially, it could be true referring to the fires, but the intensity is not related with the plagues and diseases, or we haven't been able to prove it.

On West Canada this problem is practically new, researching on this aspect is being developed, through a research organization.

Question: Researching has been done about the Global Warming on fires?

Question: We will talk later about that topic.

Question: We will have to identify new topics to link them with the others NAFC's Working Groups such as: global warming, plagues and fires, for the next meeting on March.

The Chairman congratulates and thanks the Canada presentation and comments that in México there are many similarities on the problems that exposes.

### 3.7. Understanding Memorandum Activities between Jalisco State and Alberta Province. Don Harrison. (Link File)

2003. It was signed the first fighters exchange between Alberta and Jalisco.

2005. Visit to Canada and 4 fighters were recruited and they were trained on level 1 in Canada, working in Canada, on juvenile groups.

2006. The program was continued and 8 fighters of Jalisco were trained during three weeks in Canada, finding very expensive sending people to Alberta an 5 trainers were sent to Jalisco to train 40 fighters. Were spread 7 crew in Canada with crew leaders and sub leaders, integrating themselves in an important way in Alberta. This program has had a lot of success and they want to continue.

There are other agreements that were signed. The State recognizes that the future must support to the young people. The Canadians have many years of experience and they want to share it in Jalisco.

#### Steve Roberts Canada Report

In this presentation the following subjects were approached:

- ❖ Canadian Wildland Fire Information System (CWGIS): A centralized data warehouse, maintained at the Northern Forestry Centre, for all national fire information, data collected from international, federal, and provincial/territorial sources to provides information for public safety and emergency preparedness reporting as well as scientific analysis, and the data access through the National Forest Information System (NFIS) and CFSNet
- ❖ Development of a Global Early Warning System for Wildland Fire: Provide a global metric to implement international resource-sharing agreements and provide daily fire danger information to countries that do not have a fire danger rating system.
- ❖ Estimating Annual Carbon Emissions from Canadian Wildland Fires: System being developed for international reporting requirements under the UNFCCC and possibly Kyoto Protocol; Wildland fire C emission estimates will be used directly in Canada's National Forest Carbon Monitoring, Accounting and Reporting System (NFCMARS) led by CFS.
- ❖ Fire Behavior: Updates and revisions to 1992 Canadian Forest Fire Behavior Prediction System. Models/systems for prediction of crown fire behavior.
- ❖ Stand dynamics in lodgepole pine stands following mountain pine beetle outbreaks: Characterize current stand structure using mensuration data; Reconstruct long-term temporal patterns of outbreaks and other disturbances using dendrochronology; Combining analysis to develop models of stand dynamics in lodgepole pine forests; Project future stand development under different beetle scenarios.
- ❖ Reducing Crown Fire Initiation and Spread in Lodgepole Pine: Fire Hazard Rating and Spot Fire Potential.
- ❖ Risk Management: Landscape and community fire risk (susceptibility and impacts) study completed in central Alberta; resident values study; Study of human dimension of wildfire mgt at the WUI continues (perceptions of risk, mitigation).
- ❖ Fire and Climate Change and Future Fire: More fire activity, longer fire seasons; more ignitions (human, lightning); fuel effect uncertain; suppression effectiveness uncertain; will the warming cause more fire; increasing CO2 emissions; and further the warming?

Comments:

Dante Arturo Rodríguez Trejo, comments about a work of NCR and the Chapingo University, which published a research document called “Mortality of the Pine of the Heights due to Forest Fires”. It was published on the International Journal of Wildfire. It is considered wise to perform some adjustments for the utilization of these technological tools, due to the lack of data as in Mexico. It is recommended to try the system of some specific places of the country to prove the mortality of trees and to determine correlations. It is requested to take an agreement for the selection of the areas.

Juan Manuel Frausto: How the interrelation between the fire and the human communities is incorporated in the design of the national policies in Canada?

In México many projects have been developed more balanced toward the practice, there are no too many scientific works on this aspect.

Cultures are different, in Canada are more directed on the urban interphase, but in Mexico the problem is more related with the Indian communities in the country, we don't have too much information to the respect. We have researched a lot about the fire behavior.

The Rocky Mountains Station is developing a lot of researching on the social interrelation with the fires, moving us to less aggressive policies of fighting but more integrated.

There will be a conference in Colorado about the social aspects of fire.

### 3.8. USA Report Summary. Dale Dage.

PowerPoint Presentation 2007 Fire Season Summary:

- ❖ Winter (December 2006 – February 2007) The winter (December through February) of 2006-2007 was drier than normal over the West and Southeast and wetter than normal over the central U.S. and Great Lakes region. Temperatures were colder than normal in the West while warmer than usual weather was noted over the northern tier of states and the Atlantic Coast states. Much of Alaska was warmer and drier than normal. Scattered areas of drought continued across the country as of mid-winter.
- ❖ Spring (March – May). Spring was much warmer than normal across most of the country except for cooler-than-average conditions over Texas, the Gulf Coast and Northeast states. The Southeast recorded its driest spring (March – May) and also its driest December through May on record. The West was also quite dry with California and Nevada reporting the driest 12-month period (June 2006 – May 2007) ever. Conversely, the middle third of the country was much wetter than normal. Alaska saw a rather cold March followed by a warmer-than-normal April and May. Spring precipitation varied across the state with driest weather in the southwest corner of the state. A dry winter and spring resulted in a very poor snowpack across most of the West. The April 1, 2007 snowpack map (below) showed many areas with less than half their normal snowpack, with only the Washington Cascades and a few drainages in the Rockies reporting near-normal conditions.
- ❖ The Southern Area had a very active spring fire season and by the end of May had experienced 25,130 fires burning 1,037,612 acres (which is approximately 175% of their normal year-to-date acres based on a 10-year average). Rainfall deficits were primarily centered in northern Florida, southeastern and northern Georgia, and the northern portions of Alabama (see image). As of May 24th, there were a number of areas in Alabama, Georgia, Florida, and Tennessee that had gone 40 days or longer without significant precipitation. Fuels were exceptionally dry and areas had Energy Release Component values exceeding the 97th percentile or historic maximums. Smoke also became a significant concern.

Several large fires including the Sweat Farm Road and Big Turnaround Complex pumped out large amounts of particulates over an extended time period.

- ❖ Summer (June – August) The summer of 2007 was very warm nationally, with much-above-normal temperatures across the West throughout the season, and record heat in the East during late summer. Temperatures reached record levels in June and July for portions of Idaho, Montana and the Great Basin. The Southeast bore the brunt of the heat in August with widespread record temperatures in the Ohio River and Tennessee Valleys, and in the Southeast. Precipitation varied across the country for the June through August 2007 time period. In the West, California, northwest Nevada, Idaho and Montana were drier than normal. Wet conditions persisted from mid-summer on across Arizona, the southern Great Basin, and portions of Colorado and Wyoming. The monsoon began on time with the main focus of moisture over Arizona in July. In the East, the western Great Lakes, the Ohio River and Tennessee Valleys, and much of the Southeast experienced dry conditions for most of the summer. Texas and Oklahoma remained very wet into the first half of summer. Alaska experienced warm and dry conditions for the northern and eastern portions of the state, with cool and wet conditions in the southwest. During the summer, the northern half of the Great Basin, Northern Rockies and the Northwest Areas dominated large fire activity. One exception to this was the Zaca fire in Southern California, which started on July 4th and eventually grew to over 240,000 acres by September 3rd, when it was finally declared contained.
- ❖ By the end of August wildfire activity far exceeded the 10-year average in the lower 48 States. Nationally, as of August 31, a total of 65,966 fires were reported, and 6,971,593 acres burned. The national 10-year average is 59,752 fires for 4,978,668 acres burned, which means that as of August 31, the 2007 fire season experienced 110% of average fires burning 140% of average acres. Alaska had a below normal fire season, with approximately 96% of average fires burning just 17% of average acres.
- ❖ While the number of reported wildfires is up slightly over the ten-year average, the number of acres burned is up significantly as of August 31. The Geographic Areas that have experienced the most burned acres so far this year are Eastern Great Basin (more than 1,200,00 acres above its ten-year average), Southern Area (nearly 400,000 acres above its ten-year average), Northern Rockies (nearly double its ten-year average at 950,000 acres burned), and Western Great Basin (more than 236,000 acres above its ten-year average). Overall, all Geographic Areas experienced increased burned acres except for the Southwest, Rocky Mountain and Northern California Areas.
- ❖ Additionally, 1,121 large fires had been reported to the National Interagency Coordination Center as of August 31, well down from the 1,639 large fires that were reported by this date in 2006. In comparison, by August 31 the number of large fires reported in each of the following years was: 626 in 2002; 720 in 2003; 540 in 2004; and 470 in 2005. Eight large fires or complexes have burned more than 100,000 acres apiece as of August 31. (The table below lists these fires.)
- ❖ On September 4 the National Interagency Coordination Center (NICC) had been at Preparedness Levels (PL) 4 and 5 for 59 days, the third highest number of days since 1990, and exceeded only by the years 2002 (88 days) and 2006 (66 days). On July 6 the PL was elevated to 3, and elevated again to PL 4 on July 8. The PL remained there until July 19 when it was elevated to 5, and remained there until August 26 when the Preparedness Level was reduced back to 4.
- ❖ Prescribed fire projects through August 31 are nearly twice the ten-year average. Accomplished acres are the third highest recorded in the past ten years. With the fall burning season just beginning, the number of prescribed fire projects and accomplished acres will likely increase.
- ❖ Wildland Fire Use (WFU) incidents so far this year are below the ten-year average. However, accomplished acres to date are well above the ten-year average.
- ❖ Resource Mobilizations. Demand for resources was fairly heavy through July and August, but overall less than last year. The following table shows the number of resources requested in the Resource Ordering and Status System for 2006 and

2007. Through a compact agreement Canada provided five Type 1 crews to Montana for a 14 day assignment in August. No other foreign resources were requested. No military resources were requested.

- ❖ Hurricane Support: The 2007 Atlantic hurricane season has experienced below-normal tropical activity for the summer, with above-normal activity forecast for the remainder of the fall hurricane season. As of September 3, 2007, there were 5 named storms, including 2 hurricanes, both Category 5. The hurricane season runs from June 1 to November 30, with August and September typically being the most active months. Normal activity for the hurricane season is 11 named storms with 6 becoming hurricanes. Early season tropical forecasts had called for above normal tropical activity for the 2007 season, with mid-season updates reinforcing the initial forecast. To date, tropical activity has had little negative impact to the U.S. coast. As a result, no Incident Management Teams were requested nor pre-positioned in support of tropical activity.

### **Tom Harbour, Emerging issues in Wild land FIRE Management**

PowerPoint Presentation:

- ❖ Wildland acres burned 2007, an analysis of the last fire seasons and a 10 year average.
- ❖ Type 1 incident teams assignments during 2007.
- ❖ National Incident Management Organization assignment days during 2007.
- ❖ WUI/WOOD/WEATHER: “Wood” is the increasing deposition of flammable vegetation on federal lands (the fundamental issue for federal land mgrs)
- ❖ “WUI” is the 8 million new homes in the western interface during the '90s.
- ❖ “Weather” is the warming, drying climatic variation/change which affects us
- ❖ Response to the challenge, how the challenges of the future form the fire program characteristics. The fires are more visible, but the actions we take are more debatable.
- ❖ Fire Management leadership is required to solve issues
- ❖ Must focus on key objectives.
- ❖ Must be adaptive to change.
- ❖ Must maintain the trust of our leaders, key partners, and the public.
- ❖ Fire Policy: Federal wildland fire policy formed after 1994.
- ❖ US States (50 states, 6 trusts/territories) generally have individual coherent wildland fire policy based on particular state needs.
- ❖ Local jurisdictions (counties & cities) may or may not have wildland fire policy
- ❖ Emerging Issues Needing Leadership Attention: Improving accountability, transparency, and incentives in our financing structure.
- ❖ Maintaining a high standard for employee performance.
- ❖ Transitioning from rules based management to principles based doctrine.

- ❖ Centralization of some services to promote use of high end technology and decision support systems.
- ❖ During the 70's - 90s decades, fire response appeared to be on automatic pilot, especially on T1 and T2 incidents. Large fires received about the same aggressive response.
- ❖ High value/high risk areas are worth the high cost to protect them, however, low value/low risk areas must now receive a low cost response.
- ❖ Leaders must be able to levy a measured response which balances cost with values at risk.
- ❖ Local values must be evaluated on a national scale when competing for national resources.
- ❖ Moving from the doctrine of meeting each wildfire with overwhelming mass to the doctrine of meeting each wildfire with speed, agility, and focus
- ❖ Developing local capacity to deal with local incidents
- ❖ The big issues: Protecting lives and property
- ❖ Debate about the role of the value of natural resources
- ❖ Determining roles and responsibilities of the Federal, State, Local governments and of the citizen
- ❖ Allocating the scarce resource – is it \$\$\$\$?
- ❖ Increased National control of assets to respond to changing priorities.
- ❖ Increasing oversight from OMB, GAO, IG, Congress, Secretaries, HQs....
- ❖ Potential consolidation of infrastructure including caches, GACCs, air bases, training centers, etc.
- ❖ Local management of FPU as integrated, interagency units as FPA comes online.
- ❖ FMPs changing relationship to LMPs.

### **3.9 Forest Fire Situation, Jalisco, Mexico. Power Point Presentation.**

- ❖ Physical description of the State.
- ❖ Areas of Ecological Importance.
- ❖ Watch Towers and observation points.
- ❖ Specialized equipment.
- ❖ 434 Wildfires affecting 14,662 hectares, mainly pastures and brushlands.
- ❖ Wildfire state causes stats.
- ❖ Resources allocated.
- ❖ Government funding support for community works.

### 3.10 Vicente Arriaga. México Report

PowerPoint Presentation:

National Wildfire Protection Program.

#### Wildfire In Mexico

- ❖ From 1970 to 2006 had occurred 6,835 wildfires year average, with an area affectation of 221,179 hectares (about 32 hectares per fire).
- ❖ More than 80% corresponds to grasslands and brushes.
- ❖ Presentation of National Wildfire Program Statistical Results of 2007.
- ❖ Analysis of the use of satellite technologies for wildfire detection.
- ❖ Developed activities with other federal agencies in Mexico.
- ❖ Presentation of the National Program Objectives and its main strategies.
- ❖ Actions developed by CONAFOR on Planning, Prevention and Fire Control
- ❖ Firefighting Personnel by agency.
- ❖ Firefighting Casualties.
- ❖ International Cooperations Actions and projects.

#### German Flores. Mexico Research (File Link)

PowerPoint Presentation:

- ❖ Research generators in 2007: Academy Institutions (Universities and Institutes), Organizations (TNC, WWF, Pronatura Chiapas), Government (INIFAP, INE, CONAFOR)
- ❖ Geomatics: Enhancing the fire detection system using satellite imagery and publishing the results on a Website daily. The final result will provide early alerts, monitoring and impact analysis.
- ❖ Ecologic and biologic projects: Analysis of *Arctostaphylos pungens* as an species with better adaptations or associatios to environmental disturbancies such wildfires; Study of the fire effect on mortality and relative height growing in juvenile individuals of *Pinus hartwegii* Lindl; Evaluation on the impact of wildfires in *Abies religiosa* forests on the vicinities of Mexico Valley. (among other projects)
- ❖ Ecosystem Restoration: Comparation on the response of the establishment of *Pinus pseudotrobus* in two places of Sierra Madre Oriental with 4 rehabilitation treatments: natural barriers as logs and plants; exclusion areas with wire fences; seed treatment with cattle exclusion; and a control group with unprotected plants.
- ❖ Fire Behavior: Description on fire role in forest ecosystems, and the fire behavior influence factors, with an emphasys in forests fuels and the need to manage them on the Management Plans that could be proposed; Daily, Month, seasonal,

and annual variability of CO<sub>2</sub>, CO and CH<sub>4</sub> emissions of burned biomass and its chemical compositions impacts on the atmosphere.

- ❖ Fire regime studies on several species; 1998 Rain shortage analysis; studies on climatic variabilities, high temp registries and wildfires of difficult control.
- ❖ Community interactions; Operative Activities; Fuel evaluations; Fire Protection Plan on Chiapas; Technology transference; Training, workshops and formation.

### 3.11 Isidoro Solis/Juan Manuel Frausto. Fire Management Program (File Link)

PowerPoint Presentation:

- ❖ Fire Management Program: Enhance the interaction and coordination between the government, local organizations and cooperating agencies to reduce the negative impacts of and improve fire management.
- ❖ Partners: USAID, NCWG, BLM, SEMARNAT, CONAFOR, CONABIO, INIFAP, MFNC, AMBIO, CAMDDS, CI, MABIO, PRONATURA Chiapas, Niños y Crías, TNC, Private Sector, Community Groups, Academic Institutions.
- ❖ Key Components of the program: Training and capacity program (direct cooperation between USFS-CONAFOR, Technical assistance, capacity building, classroom training, visitor exchange program), Strengthening of Local Participation (Support and coordinate activities that promote community participation, Fire Management Alliance) Fire Management Research and Technology (Fuels Management - Agreements USFS-FERA, MABIO, University of Guadalajara, Fire Risk and Impact Evaluations CONABIO, CI)
- ❖ Interactions: Support of specialized technical groups with participants from the governmental, academic and civil sectors; A work process between the agencies of the government of Mexico and the US (CONAFOR-USAID-USFS) and civil organizations; Complement of financial resources and technicians for supporting priority actions; Coordination between the efforts of the transfer of technology and research to assist in the decision making process and improving operational capacity; Interagency Coordination.
- ❖ Training and capacity program accomplishments: Fire Training Courses: S130,190, 290, 390, 271, 370, Operating Guides and Manuals; Fire Risk and Capacity Evaluations; New links with civil groups and NGO's; Introduction of the Incident Command System; New Technology: Rapel, Fire Engines; Technical Assistance in helicopter contracting, fire operations, strategy and planning; Fire Training Database.
- ❖ Training and capacity program activities: 1988-2006 International Fire Management Course (Mexico, Guatemala, Honduras, Bolivia); Fire Management Program Working Group Annual Meetings; December 2005 Hurricane Stan/Wilma Fire Risk and Capacity Evaluations; 1998-2007 ICS courses across the country; 2004-2007 S290/390 Intermediate Fire Behavior/Fire Calculations; 1992-2005 Helicopter Rappel Training.
- ❖ Training and capacity program recent accomplishments: 2006 Translation of S190/130 Basic Firefighter Course for NWCG and adaptation for Mexico; 2007 ICS 100-300 courses in hurricane impacted areas (Campeche, Chiapas, Quintana Roo, Yucatan); 2007 Translation and adaptation of ICS 400 (Jalisco, Chiapas, Campeche); 2007 Translation of the NWCG Incident Response Pocket Guide; 2007 Certification of two Helicopter Rappel Check Spotters.
- ❖ Achievements 2007: 1. Intensify links (local-national): Shared planning of the Fire Programs with CONAFOR-USAID-USFS; Support Fire Management Strategies: Chiapas State and CONANP; Fire management regulation review and forum: NOM 015. 2. Strengthen local participation: Fire Management Fund support (9 field projects, US \$ 1 million in priority regions, CAMAFU support in four regions (+ 30 groups)) 3. Project OFDA Yucatan Peninsula, strengthen the management and coordination of emergencies, and communities involvement: 7 training courses for agricultural burning ; 1 ICS training

course for communities; 1 information campaign for fire prevention. 4. Critical Ecosystem Partnership Fund CI: Local Capacity Building: \$ US 112,000 new!!

- ❖ More Achievements 2007: Intensify links (local-national); Strengthen local participation in IFM; Incorporate science y technology; Project OFDA Yucatan Peninsula, strengthen the management and coordination of emergencies; IFM for the State of Chiapas (USFS-USAID-FMCN).

Comments:

Chairman: The presented program is the current part of the whole history about the international cooperation in which this group has participated. It has a very wide program, and many people has participated, as Isidoro Solis, which understood that México had to consolidate its training and capacitating processes, keeping the programs with many efforts, many of them even personals. We recognize Dale, Isidoro and Juan Manuel participations that have helped in advancing on this process.

### 3.12 Mexico Forest Fire Information System Updating. Germán Flores.

PowerPoint Presentation.

- System Implementation in Mexico: Establish Mexico's capacity to manage directly the system.
- Train the trainers: Share the knowledge about the use of the system.
- System calibration: Generate more fuel models to improve the precision of the estimates.
- This project has great importance; we have the porpouse of continuing.
- Restart the activities of the project, continuing witj the great support of Canada.
- Co- finance the project with Mexico (CONAFOR).
- Give follow up to the projects advances.
- Keep the great enthusiasm demonstrated by this group for supporting projects among NAFC countries.

Comments

This system has reached beyond the utility for which was designed. The CONAFOR assigned a work to the Chapingo University on the possible damages if the fires are not attended. The Canadian system models have been of great utility for this evaluation and it has been very useful.

Technical aspect of the system and fire management aspect.

### 3.13 Agreements analysis of emergencies participation. Dale Dague.

- ❖ It is agreed to review the meeting report through the Meeting members.
- ❖ It is agreed that in the next meeting Halle will be contacted to review the last sketch and obtain a report for this group, which will be sent to the presents by e-mail.

### 3.14 2006 Work Plan Review.

#### Develop a common glossary for terms on fire management.

- ❖ It is suggested to gather the glossaries in a single site to have the opportunity of evaluating them. It is suggested to think of taking on this activity for 2008. It is suggested to obtain the support from the students to develop this work. It is suggested to obtain the support of the Peace Corps that will work in Mexico in 2008 for this development. It is commented that the definitions in doubt are reduced to approximately 20% of the terms.

#### Improvement of the International Cooperation in the Forest Fires Science

- ❖ It is suggested to develop basic research about the fuels and to develop a small workshop to establish some technical scientific activity.
- ❖ It is suggested to review this on Thursday.

#### CIDA and AID meeting in 2007

- ❖ It is suggested that this activity can be covered the next year. It is commented that the CIDA attitudes are sometimes not convenient. It comes from Jasper the idea of inviting donators on projects to the group. It is agreed to keep the invitation to CIDA.
- ❖ It is commented and agreed to keep tracking on all of the activities of the work plan.

#### Conduct a telephone conference at the middle of the year to keep tracking.

- ❖ It is not considered as accomplished. It is proposed to reconsider this activity on Thursday.

#### Coordinate the group reports, minutes and activities.

- ❖ It is considered almost complete and we will have to get some reports of the first 8 meetings. Keep this activity and identify the countries that elaborated these minutes.

#### Elaborate a trilateral summary of the COFAN meeting

- ❖ It is agreed to keep it on the agenda and it will be asked to XXX on this respect.

### 4. Work Trip.

- Transportation to La Primavera Forest Area.
- Visit 2005 wildfire affected zone.
- Fire engine use demonstration.
- Visit to the forest restoration zone.
- Transportation to Crowne Plaza Hotel.

## 5. Second Session.

### 5.1 FMWG History Document. Erin Small

Power Point Presentation:

History Report for the Fire Management Working Group

- Mission and Goal: Create a report to document events and accomplishments that have occurred throughout the lifespan of the FMWG. 1962-2007.
- Purpose: Due to reorganization, change in membership and simply the passage of time, information relating to the happenings of any group can be lost. In order to preserve the work that has been accomplished, learn from our past, and continue to use the knowledge and experience we have gained through the years, **documentation is necessary**
- Objectives: The creation of a comprehensive history report for the Fire Management Working Group of the North American Forest Commission will update, build from, and replace the 1997 history report, identify significant accomplishments, events, challenges, and successes that occurred during the years between 1962 and 2007, relate communication and partnership development and maintenance through the FMWG, and highlight how the FMWG has contributed to progress in fire management through cooperation.

It is suggested that the content of the part of the results of the document has to represent the COFAN objectives, in a way that reflects faithfully the activities. In this way this document will be more perdurable, grouping the projects, activities, and achievements based on the objectives.

With this scheme new documents and contents will be able to be added to the main document.

The distribution of the document of the history will be through the WEB site and possibly by doing a paper distribution.

México will include in the achievements section, the resources cooperation with USA.

#### ❖ Field Trips.

Canada: We weren't really part of the field trips organization so we don't keep copies of these reports.

USA: Do you know who could have copies of them?

#### ❖ Awards

It is agreed that each country has to keep track on the awards that have or haven't been given.

Due to that the countries agree in the meetings the giving of an acknowledgment and this is giving at each country level, there is no record of the ones that have been given.

#### ❖ Conclusions or Future.

There are not similar reports in the other groups, so this one could serve as an example. In this group important instruments have been generated in comparison with other groups. This is not easy and of short term and it could be a good example. The incorporation of the community participation is an advance that could be said worldwide. It could be included in the reference section.

These comments give us an idea of how fresh are our objectives or maybe they could be refreshed or generate new ones and to have a clearer objective of what we want to do as a group.

It is suggested to incorporate in some part of the document of the evaluation made by the NAFC to all the groups, where the group of the fire and plague management has given more achievements. The achievements have been very important but to the interior we minimize them. There are groups that have disappeared in comparison. Verify the parts that were evaluated and retake the observations and suggestions.

México agreed to submit a copy of the evaluation in English and Spanish to the USA to be integrated to the document.

There is a time gap from which we don't have information, of the presidents of the meetings. Mexico submitted the presidents names that were missing from México.

It is presented in the front what it could be the water proof to be integrated to the documents.

### **5.2 Integrated NAFC's Working Groups Meeting. Dale Dague.**

It is given to all the members a copy of a request from the NACF to have a meeting that is proposed for the week of March 3 in Washington DC. What is intended is to provide a collaboration base between the different groups.

Canada suggests that a limited group of people attends this meeting (March) and continue with the arrangements to have the programmed meeting in Canada.

México seconds the suggestion and requests knowing the minimum number of people that could attend the reunion on March.

USA suggests sending a delegate to the March meeting

It is agreed that each country will name a represent ant for this meeting and to keep the programming for the meetings.

### **5.3 Bureau Of Alternates NAFC areas of collaboration, opportunities and ideas. Canada, USA and Mexico.**

It is suggested to give a general guide for the meeting on March and to attend recommendations from BOA of COFAN derived from the evaluation as a Group.

Canada requests information about the objectives or guidelines of the meeting on March. USA comments that the objectives are common opportunities between the groups and, to add the ideas to be developed on March.

México suggests that these ideas have to be incorporated to the minute and to be given to the ones who attend the meeting on March.

It is suggested that the participants send ideas to be developed on December so the participants will be able to work on them.

USA suggests to receive one or two guidelines for each matter and to integrate a base document.

Mexico suggests meditating this topic to generate a mechanism to develop ideas for the meeting of BOA, the groups of atmospheric changes and plagues are groups with which there is an intrinsic relationship.

It is agreed that México can integrate the ideas which are judged to be treated in the meeting.

#### 5.4 Creating a Cross-boundary Framework for Community-based Fire Management: What Can We Gain?.

PowerPoint Presentation:

- Vision on the Community-based fire management (CBFM): Provided a unique opportunity to share information and experiences, and to discuss ways they could be applied; Perceived ongoing challenges: funding horizons, strengthening local capacity, incorporation of community planning, and basing practices on scientific information; The desire for subsequent opportunities to learn from other experiences was strongly supported.
- Objectives: To provide a forum for practitioners and supporters of community-based fire management programs to examine and discuss experiences in three countries; To identify commonalities in the approaches that could be applied more broadly.
- Factors contributing to success (related to the community): Recognition of the need for public awareness; Community education; Natural resources management community's driven; Fire prevention activities (fuels reduction); Community concerns about preparedness and safety; Assumption of responsibility by the community; Promotion and visibility of results.
- Factors contributing to success (external to the community): Funding and institutional support; Trained practitioners and technical assistance; Publicity of large fires; Multi-agency collaboration; Willingness to approach fire-management issues beyond technical issues: social, community, ecosystem health; International linkages and support.
- Factors influencing CBFM: Inclusion of human dimensions of fire management; Evolution of wildland-urban interface; Increase of participation of communities; Management of natural resources by communities; Rural development and forest policy issues; Risk management initiatives.
- Raising Questions: What does it mean community based fire management? How communities can integrate technical and scientific information? How to involve and create responsibility of communities? How to engage policy makers and funding agencies? Which should be the roll of fire in production activities and natural resources management?
- Key Barriers: Expanding understanding of community issues: tenure systems, economic structures and cultural practices; Integration of "technical" and "social" information. Fire impacts communities, so it must be managed by them; Recognition of the need for support training, funding and formalization of community-based fire management; Education for practitioners, professionals, and the communities they serve; Permanent operation of community's fire crews to back up fire emergencies and fire management.
- What to gain?: Development of local capacities for prevention and fire fighting, under the "safety first" principle; Multiplication of capacities and resources besides the government's efforts, specially for "extreme conditions"; Permanent source of feed back to adapt and improve fire management policies and programs; Linkages between fire, natural resources management, and rural development activities; Development of local agendas to deal with fire management, emergencies and multi-agency networks.
- Proposal: Keep the panel working as part of the FMWG; Gathering information about CBFM national policy from in each country to identify strengths and constrains : representative(s) needed; Complete the paper describing process and outcomes of CBFM panels (Kishchuk, Canada and Frausto, Mexico); Look for a technical magazine to disseminate the paper (Kishchuk)

German Flores comments that there are several applicable solutions in the communities. These communities tend to discontinue the actions when there is not keeping track on these actions.

Juan Manuel comments that an institution alone can not solve this problem, and, neither the financing from a single origin. The initiatives have functioned when many institutions converge in one community. Now we work with USAID and FS as a sample of this. It is required to document these projects with more detail.

On the explanation of the system of 10 years it is commented that USA assigned in 1998 an amount of 12 million dollars to the SEMARNAT with aircrafts and other resources through an activities matrix. At the same time the USAID gives funds of 2.5 million dollars to finance projects in community organizations. The FMCN has now a patrimonial fund to give support on projects and fire management strategies at a federal and state level.

USA comments that this a very important project, in second priority place after the signing of the cooperation agreement. It is required a PowerPoint copy. Cause they value it as very interesting.

Canada comments that we don't have to be concentrated on this aspect, because there are many elements that have more importance in our country, so we should not focus ourselves on that.

We should add to this topic a kind of conclusion in Canada and observe afterward the achievements of these projects, working in a 3 years period in the future.

It is required to document these aspects toward the countries interiors, because it is a very complicated aspect that has to have a very good documentation. For Sevilla a materials recuperation was made, but it is required more effort.

The FMCN proposes a script to document these works.

It is taken as an agreement to continue working on this matter and that the FMCN develops a script to document these works to be used in the internal by each country.

### **5.5 USAID Participation in the USA-Mexico Fire Management Program. Jorge Rickards .**

Thanks to the represent ants and supports from each country for the projects.

PowerPoint Presentation:

Estrategia del Programa de Medio Ambiente.

- Objective: To enhance de Management and conservation on specific basins.
- Main Principle: Better economic opportunities in areas that directly depend on natural resources, plus better local capacity and control over the territory and its resources, equals Conservation, sustainable use and economic development.
- Identification of the best practices to conservation and economic development: sustainable forestry; eco-enterprises, environment services to protect basins; wildfire protection and integrated management; clean production and renewable energy.
- Cooperation with CONAFOR: Forestry resources: wildfires, forestry, etc.; Sustainable forestry exploitation; basin integrated management; environmental services; other.

To the respect of the support that México has received from the USAID, the relationship between the USAID and CONAFOR is an example to be followed, due to the great spectrum of activities that almost all the attributions of the

CONAFOR hold, showing very clear results, where even the resources of the Federal Government have been used with better efficiency when supporting the community projects. Thanking the support form and used with higher efficiency and we both have learned a lot.

Rememorize the great supports shown by the USAID, with a great history of given support to the Mexican technicians to receive preparation and to be detonators in the improvement of the fighters of forest fires in Mexico. Recalling in 1983 the first course in Marana Arizona. Being then one of the most important supports, which gave another perspective to the fire program in the country. Later the great support received in 1998 when facing with its support the worst fire season in the history of México, Being able to face with better tools and technical assistance the fires mainly in Chiapas and Oaxaca. We're not only receiving the fish, but they also taught us how to fish. Thanking the Government of the USA represented by the USAID, BLM, USFS, as a partner in these activities in the forest sector in Mexico, have our thanks for your support.

The USAID thanks that a higher dialogue level had been allowed incorporating topics as the incorporation of the communities to the fire management, thanking this opportunity to work during this time , thanking the USFS, as a partner in these activities in the forest sector in México. Hopping that this contribution had been important.

#### **5.6 Letter Signing for the 5<sup>th</sup> International Wildland Fire Conference. The representatives of the delegations.**

The heads of the delegations sign the document that is presented simultaneously in projection.

It is agreed to send the Letter to South Africa and to wait the reply to this invitation.

#### **5.7 2007 and 2008 Work Plan Development. Canada, USA and Mexico.**

Dante Arturo Rodriguez: comments on the necessity of bigger supports for the researching on the preparation of better professors in México. Even though that in México there are post grade programs for the Mexican youth, it is specifically proposed to take an agreement to establish a plan or mechanism in order that the Mexicans youth can prepare in the USA and Canada universities and so strengthen the capacities of Mexico on these topics.

Dale Dague: Talks about two Topic projects that were reviewed with anteriority. Forming a group to review and determine if these actions can be helped.

Roberts: We reviewed the work plan and we should go back to the third one to talk about the scientific meetings as the one that will have in Florida. I think this project has finished and I would like to know if something else could be added. As the topic proposed by México. May be incorporate in a seminar the project in particular of what is proposed by Mexico.

It is agreed to develop a table with the projects with responsables as initial part before publishing the minute.

It is proposed to establish a fund for small activities as the glossary translation, no for projects, but minor activities and in this way be able to execute them rapidly

USA comments on the particular that there are not funds without the presentation of a sketch.

Canada: Will present a sketch on January about the development and consolidation of the glossary. It is important to consider our involvement in the 5<sup>th</sup> Congress and to propose a topic about our group, and that some of our members will be there and will take advantage of the opportunity to talk about the fire management perspective of our group in the Congress.

Mexico: It is proposed to bring back to life the agreement between México and Canada and put it as part of the cooperation of the group.

Dennis: We have worked on this memorandum, and we have it on sketch and we can establish the link between the three countries to establish it between the three countries. Because for Canada and Mexico is very important.

### **5.8 Defining the Next Group Meeting, Place and Date. USA, Canada and México.**

I thank on behalf of the USA delegation the organization of this meeting. To our Canadian friends the support, and to the three countries for giving too much time to the work of this group and I wait for the next meeting of this group.

#### **Canada Dennis Brown**

I thank Vicente, the organization of this meeting, I enjoyed the hospitality and the trip by the forest, it was a great opportunity, and I think we should do something like that the next year. We will begin to work to involve ourselves more with Mexico and, if we can, help with the cooperation that México has with Central America on what it requires as information exchange.

México: I thank hat high level officials which visit us had could be with us and we are sure that for more than 40 years this has brought great benefits to the three countries, but advancements are continuing to be reported and the agenda is renewed with new activities.

#### **Canada Steve Roberts**

We decided that to help us to decide some ideas in the next meeting which are:

Three problems arise:

The urban interphase.

The plague of the Mountain Pine.

Support the management programs of other countries.

I would like to receive comments.

#### **Canada Dennis Brown**

Support other works from other groups, since this holds a great advancement on the international cooperation and to see the work of a group like ours from another world region to share how is the work and how do they solve their problems Maybe integrating the South American group could be a good option and there is a great number of members and inside the USAID we could invite the partners from New Zealand and Australia and maybe an objective could be to share these information and I propose to have a lateral meeting as we have had in the past inviting one of these groups.

#### **Canada Steve Roberts**

I would like to abound on this. We can have access to resources to invite technicians from other countries and this could be done, ,I would like to make a request because this would be of great interest, to explain how this group works and how our agencies work and to share science and technology resources, we can get financing for this. I will make the request, but I think we won't be able to do it next year, but we will try it anyway.

We want to do the meeting at the West Calgary and Vancouver.

Next to Calgary there is much access to interphase and plagues.

Vancouver is very far from everything, we can do something in Victoria,

Edmonton was one of the other meetings, but is a little far from the plagued forests and the interphase

Yukon is another option there is interphase.

Calgary is near Edmonton to continue the system development that we have with the Mexicans and it is only at 4 hours from Edmonton.

It is agreed that the next meeting will be in Calgary.

We would like to leave the date pending and maybe at fall will be the best date, as on October, toward September. Toward the weekend of September 22 and 23.

It is agreed that tentatively the date will be toward the 22 and 23 of September.

#### **5.9 Final Words Vicente Arriaga and closing:**

I thank the attendance of the entire Mexican delegation, its effort to make possible this meeting. I offer an apology for my absences and mainly from our General Director, I coincide with the event of the Forest Expo and our agendas got too full. I thank you and I invite you to get to know the Forest Expo.

Being this said, I formally close the XLI NAFC work group meeting. Thanks a lot.