



# **COLUMBIA BASIN FISH AND WILDLIFE AUTHORITY**

## **Development of Fish and Wildlife Program Amendments**

*Joint Technical Committees and Members Advisory Group  
Amendment Strategy Workshop*

**July 24-25, 2007**



# CBFWA Vision

- Regional goals linked to SBP/Recovery goals
- Defined BPA obligations
- Defined role for managers



- F&W Priorities Addressed
- Adequate Funding
- Regional commitment to mitigation
- Explicit coordination strategy

# Schedule for Future Decisions Affecting Fish and Wildlife

2007

2008

2009

2010

2011

2012

Fish and Wildlife  
Manager Program  
Evaluation

Council Amendment  
Process

Council Power  
Plan Development

BPA 2010 Rate Case  
Development

Council 2010 Project  
Selection Process

BPA 2010-? Rate Case

Council 2010-? Funding  
Recommendations

Recovery Planning

FCRPS Biop Remand

# CBFWA Approach for Draft Amendment

## Subbasin Scale

Strategies



Limiting Factors



Focal Species



Trawl and haul



Reservoirs=poor reproduction

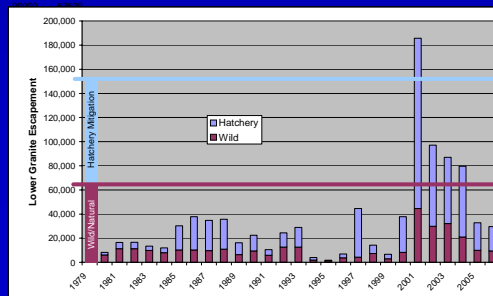


Harvest = 5 kg/hectare

## Mid-level Scale (i.e., ESU or Province)



Achieve population targets



Hatchery and Natural allocation



60,700 Sp/Su Chinook Salmon at LWG

# Hierarchy

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**Biological Objectives (mid-level)**

**Survival targets (by ESU)**

**Mainstem (adult and Juvenile)**

**Productivity targets (all fish)**

**Natural and hatchery**

**Substitution**

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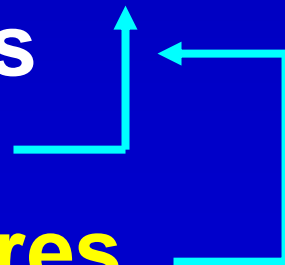
**Biological Objectives (population)**

**Limiting Factors**

**Threats**

**Strategies**

**Measures**



# Losses/Mitigation

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## Operations losses

Survival targets (by ESU)

Mainstem (adult and Juvenile)

Tributary (offsite)

## Construction/Inundation losses

Productivity targets (all fish)

Natural (habitat actions)

Hatchery production

Substitution (off site)

# **BPA Customer Groups Proposal**

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## **Purpose:**

**To provide a structure for defining FCRPS responsibility that is used in conjunction with Regional Fish and Wildlife Biological Objectives**

## **Key Principles:**

- FCRPS responsibility is based on FCRPS impacts**
- The measurement of mitigation success is NOT based on population numbers**
- Separate responsibilities for mainstem projects and storage facilities**



# BPA Customer Groups Proposal

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## **Migration corridor facilities –**

- **Similar survival targets as natural river (focus on adult and juvenile survival through system or individual projects)**
- **Replace lost habitat with habitat and hatchery production**

## **Storage facility mitigation –**

- **Focus on hatchery production to offset anadromous losses**
- **Resident fish substitution equal to losses**





# Mainstem Survival Questions

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*...provide for improved survival at hydroelectric facilities (NPA839b(h)(6)(E)(i))*

**Should survival targets be set by ESU?**

**Juvenile and adult targets?**

**How is survival currently measured?**

**By project or total system?**

**How to offset unattainable survival targets?**



# Mainstem Survival Objectives

## Anadromous Fish by ESU

- Establish juvenile survival targets for each species (by project or through system depending on ability to monitor, BiOp)
- Establish habitat actions as offsets by identifying populations where system survival is identified as a primary limiting factor (linkage to pops)



# Mainstem Habitat Questions

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**Lost mainstem spawning habitat (resident and anadromous)**

**Set hatchery production targets to offset lost spawning habitat?**

**Set improved natural production targets to offset lost spawning and rearing habitat?**

**Natural production targets met through habitat actions?**



# Mainstem Habitat Objectives

## Anadromous Fish

- Use hatcheries to produce equivalent recruitment targets tied to loss estimates
- Set specific hatchery production targets tied to expressed losses

## Resident Fish

- Short term target would be to complete loss assessments
- Long term targets established through that process



# Blocked Area Questions

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**Substitution for anadromous fish losses**

- Above Chief Joseph Dam: 2.9m fish**
- Above Hells Canyon Dam: 1.1m fish**

**Natural and hatchery production targets tied to these losses?**

**Anadromous and resident fish?**

**Natural production targets met through habitat actions?**

**Restore natural populations to near historic levels?**

**Achieve passage to meet anadromous goals above blockages?**

# Blocked Areas Objectives

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- Set natural and hatchery production targets to meet these losses by species
- Natural production targets met through habitat actions
- Near term resident and anadromous fish substitution
- Long term develop passage at Chief Joseph and Coulee



# **Wildlife Recommendations**

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**Complete Construction/Inundation  
mitigation**

**Improve crediting and conflict  
resolution processes**

**Develop operation loss assessments**



# Objectives

Not Listed

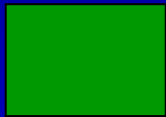
**Subbasin (MPG):**

John Day



**Populations:**

Middle Fork



North Fork



Granite Creek



Upper



**Province/ESU:**

Columbia Plateau/Mid  
Columbia



**MPGs:**

Yakima



Walla Walla/Umatilla



John Day



Deschutes

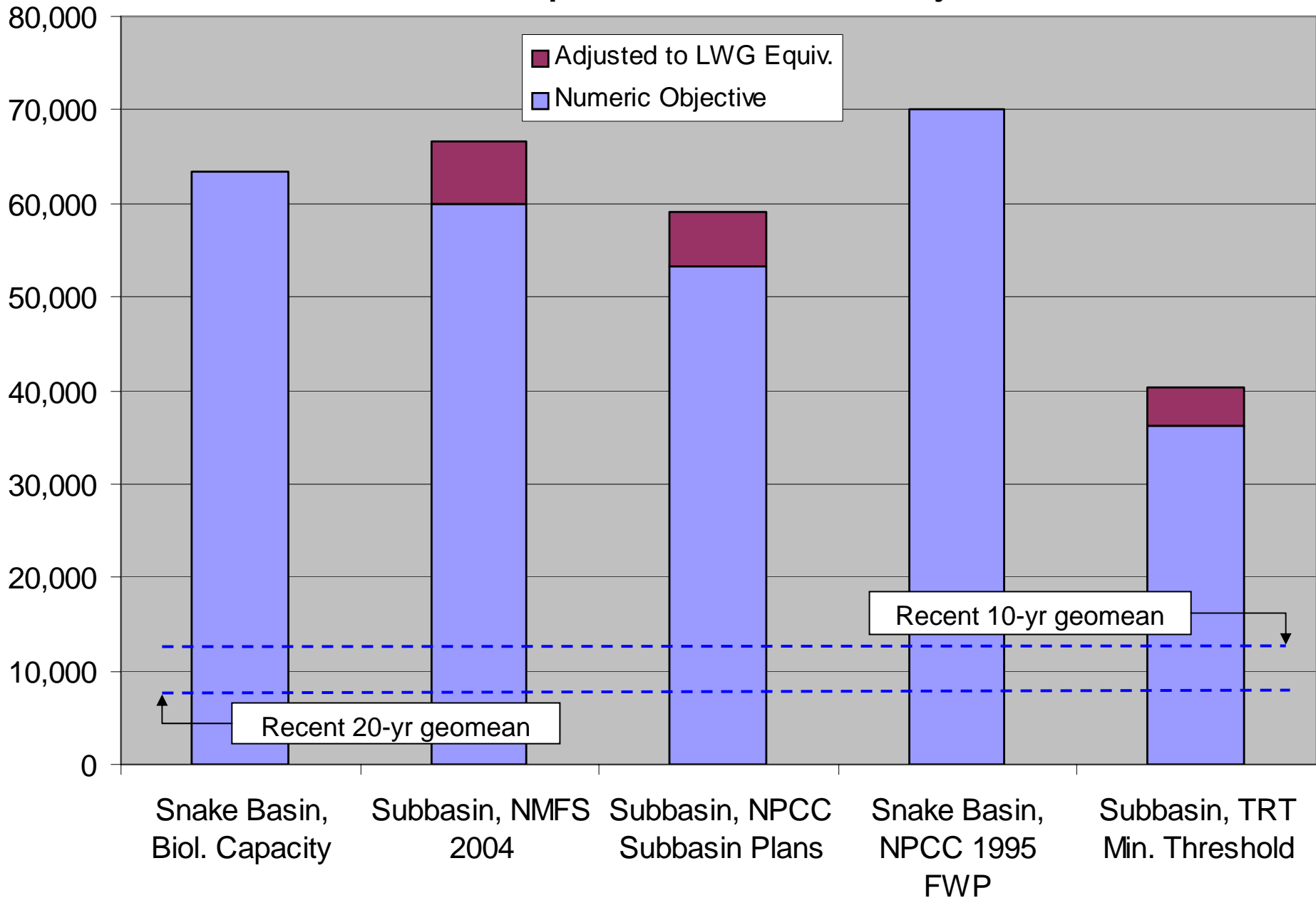


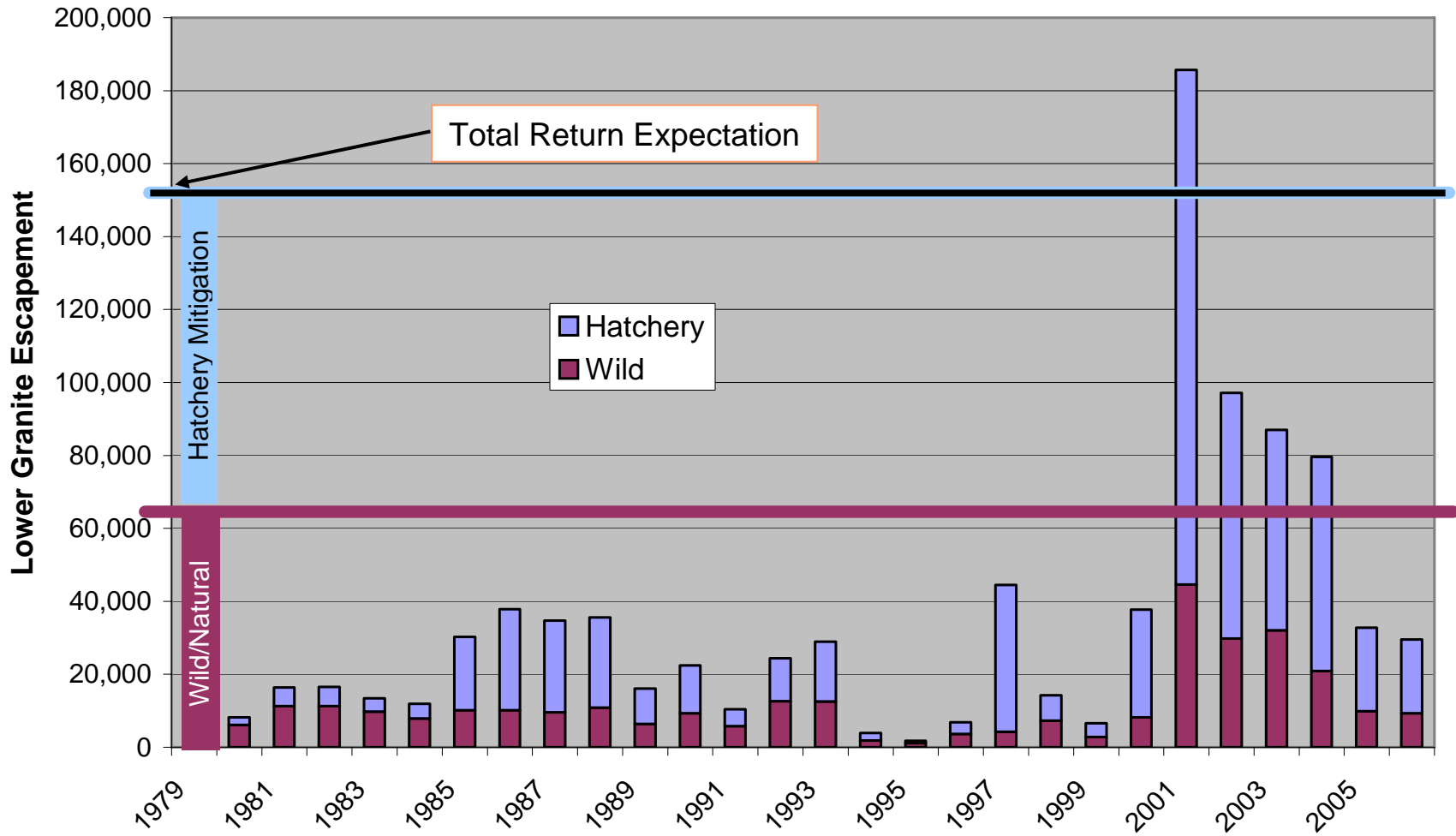
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# Snake River Wild Sp/Su Chinook Salmon Objectives



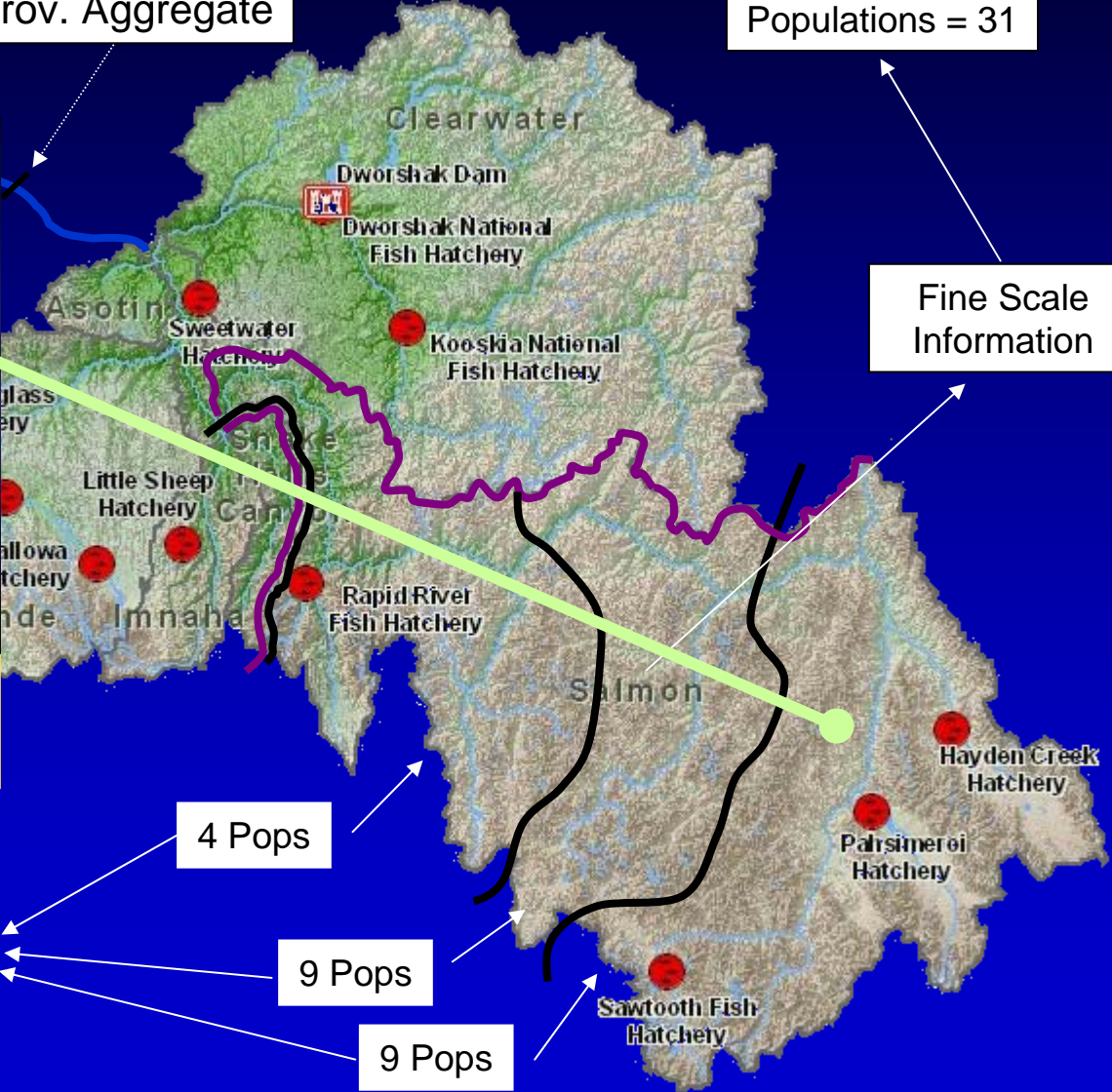
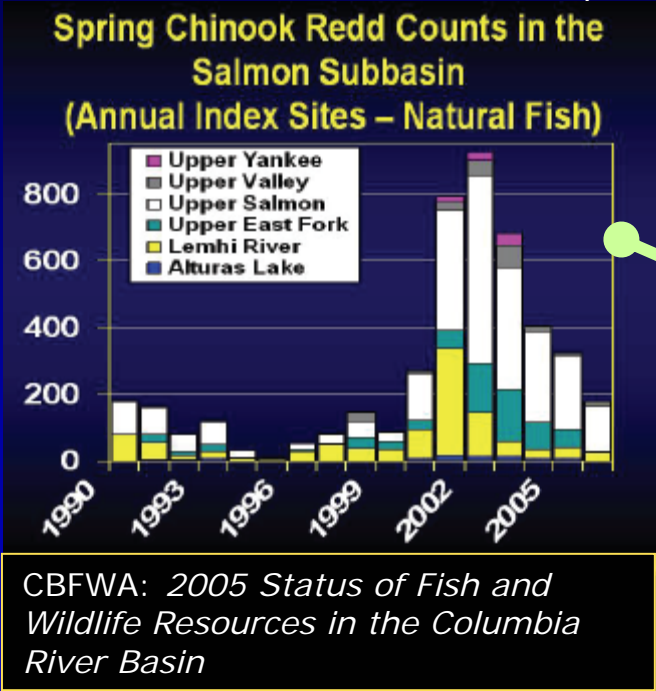


# Snake River Spring/Summer Chinook Salmon Opportunities to Establish Wild Fish Goals

63,000 +/-  
Adjusted Hist.

??,000  
Prov. Aggregate

Provinces = 2  
Subbasins = 6  
Populations = 31



Fine Scale Information

4 Pops

1 Subbasin  
3 Major Population Groups  
22 Populations

9 Pops

9 Pops