

**Coquille Indian Tribe:  
Tribal Population Study**

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## SUMMARY

This report provides a population study of the Coquille Indian Tribe. Most members of the Coquille Indian Tribe live in the Coos Bay-North Bend area on the southwestern coast of Oregon. The study discusses recent and current population trends, highlighting changes in population size, age and sex composition, and births and deaths.

### What's In the Report

The study reports three alternative population projections for the tribal population. Each projection shows the population outlook for the 25-year period of 2003 to 2028. A most likely medium growth assumption is based on current trends in births and deaths, including the assumption that life expectancy at birth improves at the same pace as the Oregon population. A low growth assumption includes slightly lower fertility and slightly slower mortality improvements. A high growth assumption includes slightly higher fertility and slightly faster mortality improvements.

The final section of the reports discusses the population implications for schooling, the labor force, and the elderly.

There are three appendices for the report. The first part discusses data sources for this population study. The second part describes the methods used to prepare the population projections. And the third part displays detailed tables for the assumptions and results for the three population projections growth scenarios.

### Current Population Trends

The Coquille Indian Tribe has a population of 816 members on December 31, 2003, based on a September 2, 2003 population register count and an estimate for the births and deaths between September 2<sup>nd</sup> and December 31<sup>st</sup>. During the 1989 to 2003 period, the tribal population has witnessed an annual average of 3 deaths and 17 births, or an average annual addition of about 14 members.

There are considerably more births than deaths for two reasons. First, the tribal population is relatively young, with more than one-half of the population less than 25 years of age. This means that there are a comparatively large number of younger adults who may have children.

The second reason for more births has a more complicated explanation. Based on evidence on fertility levels for other American Indian populations, we expect that the average Coquille Indian couple would have about 2 children over their lifetime. The number of births registered during the 1990 to 2003 period for the Coquille Indian Tribe, however, indicates that the average couple has 2.8 children, considerably higher than expected. The explanation for the higher number of 2.8 children is as follows:

- Many Coquille Indian Tribe members have partners who are not tribal members. But, because tribal membership is based on lineal descent, the offspring of any tribal member is eligible to enroll in the Coquille Indian Tribe.
- The report describes how I prepared estimates that suggest that about 80 percent of tribal members have a non-tribal partner. Further, when both parents are tribal members, virtually all offspring are enrolled in the tribe. When only one parent is a tribal member, however, it appears that about three-fourths are enrolled.
- In summary, it appears that the average Coquille tribal member has about two children, but that partnership with non-tribal members increases substantially the number of births that are registered with the tribal office each year.

Although most of Coquille Indian Tribe lives in the Coos Bay-North Bend area, there are a substantial number of members in nearby Douglas, Jackson, and Lane counties of Oregon. There are smaller number

of tribal members living in California and Washington, and a few, widely scattered members in several dozen other states of the United States.

### **Population Projection Results**

We expect to see considerable population growth for the Coquille Indian Tribe during the next 25 years, including the following:

- For the medium projection, the Coquille Indian Tribe is expected to increase from 816 in 2003 to 1,252 in 2028, a gain of 436 persons or more than 50 percent. We expect that average annual increases will be about 17 persons, or about the same as experienced in recent years.
- For the low projection, the Coquille Indian Tribe is forecasted to increase from 816 in 2003 to 1,146 in 2028. Even in the low projection, there will be a substantial population increase of 330 persons, or 40 percent, over the next 25 years. The tribal population will increase with an average annual increase of 13 persons, or about 4 persons fewer than the current average.
- For the high projection, the Coquille Indian Tribe is expected to more than increase from 816 in 2003 to 1,425 in 2028, an increase of 609 persons or 75 percent. The high projection assumes that average annual increases will be about 24 persons, or about 7 persons more than at present.

The key results from the cohort-component method are as follows:

- The main body of the report discusses results for the total population, age and sex groups, and for births and deaths. The report also describes population implications for schooling, labor force, and the elderly. Detailed results on the age and sex of the population, from 2003 to 2028, using the cohort-component population projection model, are shown in the Appendix. Results are shown for the fertility, mortality, and net migration assumptions, as well as for the projected five-year populations by age and sex.
- Coquille Indian Tribe is expected to have considerable more births than deaths under each of the three population growth assumptions. As such, we expect that the Coquille Indian Tribe population will grow substantially during the next 25 years.
- Although the tribal population will age, the number of deaths will remain low (4 to 6 per year, on average). The number of births will become larger during the next 25 years, increasing from 17 per year to about 19-34 (depending upon the growth assumptions) in 2028. Because the number of births increases and the number of deaths changes little, the average annual increase of the tribal population is expected to be larger in 2028 than at present. Based on the medium growth assumptions, we expect that in 2028 that the average annual increases will be about 18 persons (assuming 24 births and 6 deaths) compared to current annual increases of about 14 persons (assuming 17 births and 3 deaths).
- Along with population increases, the tribal population will change its age distribution. Although the Coquille Indian Tribe population will continue to be relatively young – compared to the Oregon population, for example – there will be noticeable differences in its age structure, including:
  - The population aged 0 to 14 will increase during the next 25 years. But the relative proportion of this age group, as a percentage of the overall tribal population, will decrease. There will be a growing number of students enrolled in the Kindergarten to 8<sup>th</sup> Grade. But because there will be even a greater number of tribal members who are in the adult years, there will *not* be an increased burden of children and youth compared to increases for the tribal population.

- The population aged 15 to 24 will change very little during the next 25 years. There will be about the same number in the high school and college/vocational school years during the period of this projection.
- The most rapid increases in numbers for the Coquille Indian Tribe population will be in the younger adult years, 25 to 44 years, during 2003 to 2028. This will occur because there are large numbers of youth who will become 25 years and older during the next 25 years. As a result, the younger adult population, who numbered 193 persons in 2003, will increase significantly to 339 persons, a gain of 146 persons or 75 percent more, by 2028 – under conditions of the medium population growth assumptions. This age group has several distinctive demographic characteristics: (a) young adults are beginning their employment and may require job training or retraining if they change jobs, (b) they are often starting their families and may have need for the care of young children, and (c) they often want to purchase a home and incur extra expenses associated with homeownership.
- The tribal population in the older adult years, 45 to 64 years, will increase but will remain at about the same relative proportion of the overall tribal population.
- The second age group that will increase substantially in the Coquille Indian Tribe is the elderly adult population, aged 65 years and older. The elderly adult population will increase from 52 persons in 2003 to 134 persons in 2028, a gain of 82 persons – under the medium growth assumption. The increases, however, will be in the 65 to 84 age group and there will be little change in the number of tribal members who are 85 years of age and older. The “oldest old” who are 85 years of age and older typically has greater needs for assisted living or nursing home care and, often, incurs greater health care and housing expenses. The increased number of elderly tribal members, for the next 25 years at least, are “younger” elderly, although the number of elderly who are 85 years and more will increase in the long run, after 2028.

## INTRODUCTION

### Background

The Coquille Indian Tribe, located at Coos Bay, Oregon, requested that I conduct a study that helps to understand population changes and their implications for the Coquille Indian Tribe. They also asked to a study that discusses the likely effect of population changes for schooling, employment, health care, and the elderly.

The Coquille Indian Tribe numbered 816 members as of December 31, 2003. Its members reside primarily in the Coos Bay and North Bend, Oregon areas and in the surrounding five counties. Most members live within the urban areas of Coos Bay and North Bay. There are a small number of members living in other counties of California and Washington, as well as a scattering of members in several dozen other states.

Although tribal records include counts of births and deaths, they have not been systematically examined before in order to calculate birth and death rates. Tribal records include such information as the gender, birth date, and residential address of members. No study has been made, however, of the age and sex composition of the current tribal population. Finally, no work has been done on likely future changes for the total population size and composition of tribal members.

### Purpose of Study

In order to understand recent population trends and how they are likely to influence the Coquille Indian Tribal population in the future, this study examine the current age and sex composition of the current population, recent birth and death trends, and prepares a population projection for the Coquille Indian Tribal population for the 25 year period from December 31, 2003 to December 31, 2028. The study assumes three levels of possible population change – low, medium, and high growth scenarios. The study also discusses the possible implications of population change for schooling, employment, health care, and the elderly.

### Study Approach

This population study is based on recent trends in births and deaths, from 1990 to 2003, for the Coquille Indian Tribe and on the age-sex distribution of the tribal population as of December 31, 2003. In order to project the population 25 years, from 2003 to 2028, it is necessary to make two specific types of assumptions. First, we need to make detailed assumptions about the likelihood of mortality by age and sex. In order to do this, I examined the likely number of deaths for each year, from 1990 to 2003, based on the current age-sex distribution of tribal members based on a mortality table for the Oregon population. A mortality table is demographic model that shows the probability of dying by age and sex. Mortality tables, for example, as routinely used by life insurance companies to predict mortality and by the U.S. Social Security Administration to forecast the number of survivors who will collect Social Security benefits. My analysis of the number of annual deaths for the Coquille Indian Tribe suggests that mortality for tribal members is very similar to that for Oregon residents. I used current mortality tables for Oregon residents for this study.

The average number of children born to Oregon couples is slightly over 2. After examining the annual number of births for the Coquille Indian Tribe, based on tribal data on children and youth who were born each year since 1990, I discovered that there are considerably more children and youth enrolled than would be expected if adult tribal members were having 2 children. I realized that tribal membership, however, is based on lineal descent and newborns may be enrolled even though only one of their parents is a Coquille Indian Tribal member. I developed special methods and assumptions to handle this situation for the population projection. These methods and assumptions are described more fully later in this report.

The report presents three alternative population projections. One series is called medium-growth scenario. It assumes that current levels of births continue in the future and that mortality conditions will improve

similar to the future change for other Oregon residents. A second series is called low-growth scenario. It assumes that there will be fewer births and that mortality improvements will not be quite as rapid. A third series is called high-growth scenario. It assumes that there will be more births and that mortality improvements will be faster.

### **Small Numbers**

It should be noted that population numbers – and changes in the numbers – are small for Coquille Indian Tribe. Because the numbers are relatively small, there is considerable fluctuation from year to year in the number of observed events, such as births and deaths. For example, during the past 12 years, there has been an average of slightly less than 3 deaths each year. But the observed number of observed annual deaths fluctuates considerably, usually in the range of 1 to 5 deaths. Moreover, there was one year (1994) with no reported deaths and one year (2002) with 7 deaths. The number of reported births also varies yearly. Over the past 12 years, there have been about 17 births each year, with the usual number of reported births being between 14 and 20. Some years, however, included considerably more births (24 births in 1990) or fewer births (12 births in 1993).

The effects of these fluctuations in births and deaths means that there can be considerable variation in annual population changes. It would not be unusual, for instance, for the tribal population to increase by, say, 25 members if there were an unusually large number of births and relatively few deaths. At the other extreme, it would also not be unusual for the tribal population to grow by less than 5 members if there were unusually few births and relatively more deaths.

The small numbers of tribal members in some age groups also means that changes in population figures can vary considerably. There are currently 7 tribal members who are 85 years of age or older. This is an age group that typically has higher medical expenses and is more likely to require assisted living or nursing home care. The future number of elderly persons who are 85 years of age will be greatly effected by the number of current tribal members who survive to 85 years and older as well as the mortality experience for the elderly themselves. Because of the small number of individuals in this age group, it is difficult to forecast with precise the exact number of tribal members who will be alive at 85 years of age and older in future years. If there are a greater number of comparatively healthy elderly, the number of elderly persons who are 85 years and older may be higher than the numbers cited later in this report. The main point of this discussion is to alert readers that they can be considerable fluctuation around the projected numbers because of the small number of people in most age groups of the Coquille Indian Tribe.

### **Interpreting Population Projections**

I recommend that readers view population projections as one of several available sources of information about likely future conditions. The projections reported here are based on recent trends for the Coquille Indian Tribe. While the past gives some indication of what is likely to happen in the future, there always the possibility of unforeseen events that could have a significant impact of population change. Thus, users of this projection should be aware that new changes could occur and that it is wise to evaluate projections periodically in future years. Coquille Indian Tribal leaders and members, for example, may have informed judgments about the future outlook for such topics as economic changes and repercussions for employment. Other sources of information can be helpful in thinking about the outlook for population changes and I recommend that other information, in addition to these demographic forecasts, be used in judging the outlook for the Coquille Indian Tribe.

Given that these projections are developed for long-term trends, they are conservative. This means that they do not assume drastic changes to the population trends that have developed over recent decades.

### **Report Organization**

This report presents a population projection for the Coquille Indian Tribe, Oregon for the 2003 to 2028 period. The projection is based on the Coquille Indian Tribal population as of December 31, 2003. The next section of the report discusses the current population of the Coquille Indian Tribe, including

population trends, the age and sex composition, where members live, and births and deaths. The following section discusses population projection results, including changes in population size, age and sex groups, deaths, and births. The last section of the report discusses population implications of the projections for schooling, the labor force, and health care and the elderly.

There is an appendix to this report. The appendix includes three parts. The first part discusses data sources for this population study. The second part describes the methods used to prepare the population projections. And the third part displays detailed tables for the assumptions and results for the three population projections growth scenarios.

## CURRENT POPULATION

Based on the Coquille Indian Tribe's population register and estimated births and deaths for the September 2 to December 31, 2003 period, we estimate a tribal population of 816 members, including 404 females and 412 males, on December 31, 2003. Based on analysis of births and deaths since 1989 the tribal population numbered 618 on December 31, 1989, an increase of 198 tribal members in the 14-year period from 1989 to 1993.

The tribal population has been increasing by about 14 members each year during 1989 to 1993. On a relative basis, this is an average annual population growth rate of about 2 percent (1.99 percent to be exact). At a rate of 2 percent growth per year, the tribal population would double every 35 years.

The tribal population is relatively young, mainly it was a comparatively younger adult population when the Coquille Indian Tribe was restored in 1989 and because there have been a high addition of births during the past fourteen years. At present, almost one-third (31 percent) of tribal members are less than 15 years of age. Almost one-fourth (22 percent) are in the high school, college, and early adult years of 15 to 24 years. Taken together, more than one-half (53 percent) of tribal members are less than 25 years of age.

It may be helpful to illustrate the relatively youthfulness of the Coquille Indian Tribe by noting that the median age (the age at which one-half are younger and one-half are older) for tribal members is 24 years. This is much younger than for Oregon residents, which has a median age of 33 years are present.

Age Group	Percent in the Age Group
0-14	31%
15-24	22%
25-44	24%
45-64	17%
65+	6%

About one-fourth (24 percent) of tribal members are in the early adult years, 25 to 44 years of age. Another 17 percent are in the older adult years, 45 to 64 years of age. Taken together, about two-fifths (41 percent) of tribal members are in the labor force adult years, 25 to 64 years of age.

Relatively few tribal members are, at present, over 65 years of age. Only 52 members, or 6 percent of all tribal members, are 65 years of age and older.

Based on analysis of tribal records from 1989, there have been more new children registered each year than deaths. Available records show the following information for births, deaths, and net increase for the 1990 to 2003 period:

<b>Year</b>	<b>Births</b>	<b>Deaths</b>	<b>Net Increase</b>
<b>2003</b>	<b>17</b>	<b>2</b>	<b>15</b>
<b>2002</b>	<b>18</b>	<b>7</b>	<b>11</b>
<b>2001</b>	<b>21</b>	<b>4</b>	<b>17</b>
<b>2000</b>	<b>20</b>	<b>1</b>	<b>19</b>
<b>1999</b>	<b>17</b>	<b>5</b>	<b>12</b>
<b>1998</b>	<b>15</b>	<b>1</b>	<b>14</b>
<b>1997</b>	<b>12</b>	<b>3</b>	<b>9</b>
<b>1996</b>	<b>18</b>	<b>3</b>	<b>15</b>
<b>1995</b>	<b>16</b>	<b>1</b>	<b>15</b>
<b>1994</b>	<b>13</b>	<b>0</b>	<b>13</b>
<b>1993</b>	<b>14</b>	<b>4</b>	<b>10</b>
<b>1992</b>	<b>17</b>	<b>1</b>	<b>16</b>
<b>1991</b>	<b>15</b>	<b>2</b>	<b>13</b>
<b>1990</b>	<b>24</b>	<b>5</b>	<b>19</b>

There have been an average of 17 births and 3 deaths each year, or an average net increase of 14 tribal members. Because the size of the Coquille Indian Tribe is relatively small (compared to larger populations such as counties and cities in Oregon), the number of births and deaths fluctuates considerably from year to year. The usual range for births is between 14 and 20 each year; the typical range for deaths is between 1 and 5 each year.

Data are available for September 2, 2003 on the residential address for most tribal members. I examined the county and state of residence for tribal members. Based on available data, 62 tribal members did not have a reported address on September 2<sup>nd</sup>. (My understanding is that addresses are available in tribal records for all members. If it were important to have this information, it is my understanding that tribal records could be used to produce a complete address listing.) For members with a known address, the majority (65 percent) live in the State of Oregon. One-third of all members who live outside Oregon; most live in California (12 percent of all members) and Washington (9 percent of all members). In total, more than 80 percent of tribal members live in the three Pacific Coast states of Oregon, California, and Washington. Members are widely scattered in other U.S. states, with some members living as far as New York (1 member), Washington, D.C. (1 member), and Georgia (1 member).

Figure 2 presents a map for the residence of tribal members, by county, for the Pacific Coast states. More than one-third of all members (34 percent) reside in Coos County. Substantial numbers live in Lane (7 percent of all members), Jackson (6 percent) and Douglas (5 percent) counties of Oregon. The other main areas of residence with 5 or more tribal members include (a) Clackamas, Clatsop, Curry, Deschutes, Marion, Multnomah, Washington, and Yamhill counties in Oregon, (b) Contra Costa, Los Angeles, Monterey, Sacramento, San Diego, Santa Clara, Sonoma, Tehama, and Venture counties in California, and (c) Clark, King, Pierce, and Snohomish counties in Washington.

## POPULATION PROJECTION RESULTS

This section reports results for the population projection for the Coquille Indian Tribe for the 25-year period of December 31, 2003 to 2028. This section presents results for the total population, age-sex groups, and future changes due to births and deaths.

### Total Population

The population of the Coquille Indian Tribe is expected to increase substantially from 816 members in 2003 to 1,146 to 1,427 members in 2028, depending upon the growth assumptions for the projection. Based the medium growth assumptions – the growth that we could most likely expect given past and current birth and death rates for the tribal population – the Coquille Indian Tribe would increase from 816 members in 2003 to 1,252 members in 2028, an increase of 436 members, an overall increase of 436 members or 53 percent. This rate of increase is very similar to the rate of change in recent years because it assumes that the tribal population would increase by about 17 members per year.

Year	Low Growth	Medium Growth	High Growth
2003	816	816	816
2008	873	890	917
2013	940	976	1,034
2018	1,010	1,067	1,159
2023	1,080	1,159	1,287
2028	1,146	1,252	1,427

### Age Groups

Although the Coquille Indian Tribe is expected to experience considerable population growth during the next 25 years, there are likely to be variations for different age groups. We examine the change in the relative distribution for five age groups: (a) children and youth aged 0 to 14 years, (b) older youth aged 15 to 24 years, (c) younger adults aged 25 to 44 years, (d) older adults aged 45 to 64 years, and (e) elderly adults aged 65 years and older.

**Age Group 0-14.** There are currently 251 tribal members who are aged 0 to 14. These numbers are expected to increase steadily in coming years because the enrollment of more and more births. But, because we expect that the tribal population will grow overall, we expect that the relative proportion of tribal members who are 0-14 years of age will decrease slightly during the next 25 years.

Year	Low Growth	Medium Growth	High Growth
2003	31%	31%	31%
2008	28%	29%	31%
2013	27%	30%	34%
2018	26%	30%	35%
2023	26%	29%	34%
2028	25%	28%	33%

Under the conditions of the most likely medium growth assumptions, we expect that the number of 0-14 yearolds will increase from 251 in 2003 to 353 in 2028 (Appendix C. presents a wide range of information of the projections). Overall, however, we expect that the proportion of children and youth that aged aged 0 to 14 years, as a proportion of the total population, will decrease from 31 percent in 2003 to 28 percent in 2028.

**Age Group 15-24.** We do not expect to see large increases in the number of tribal members who are age 15 to 24 years during the next few decades. At present, there are 177 tribal members in this age group. We expect to see a slight decrease in numbers in this age group, declining to about 160 members in about 2013,

and then increases to about 200 in 2028. As a proportion of all tribal members, we expect that the percentage will decrease from 22 percent in 2003 to about 14 to 18 percent in 2028, depending upon the growth assumptions.

Year	Low Growth	Medium Growth	High Growth
2003	22%	22%	22%
2008	20%	20%	19%
2013	17%	17%	16%
2018	16%	15%	14%
2023	16%	16%	16%
2028	14%	16%	18%

**Age Group 25-44.** We expect to see fairly significant increases in the number and relative proportion of tribal members who are in the younger adult ages, 25 to 44 years. This will occur primarily because of the large teenage tribal members who will become younger adults during the next 25 years. At present, there are 193 tribal members who are 25 to 44 years of age. Under the medium growth assumptions, this number will increase to 339 in 2028, an increase of 146, or more than 75 percent.

Except for the conditions of the high growth assumption, we expect to see gains in the relative proportion of tribal members who are in the age group 25 to 44 years.

Year	Low Growth	Medium Growth	High Growth
2003	24%	24%	24%
2008	27%	26%	25%
2013	30%	29%	27%
2018	32%	30%	28%
2023	31%	29%	26%
2028	30%	27%	24%

**Age Group 45-64.** We expect to see increases during the next 25 years in the number of tribal members who are aged 45 to 64 years. Overall, for the medium growth assumptions, we expect to see increases in the number of tribal members in the age group 45-64 from 143 in 2003 to 225 in 2028. These increases, however, will be almost the same as the overall growth for the tribal population. As a result, we expect to see little change in the relative proportion of tribal members who are in this age group.

Year	Low Growth	Medium Growth	High Growth
2003	18%	18%	18%
2008	19%	19%	19%
2013	19%	18%	17%
2018	19%	18%	17%
2023	17%	16%	14%
2028	20%	18%	16%

**Age Group 65+.** At present, there are relatively few tribal members who are 65 years of age and older. This will change in the future. Although there are variations for different growth scenarios, we expect that the number and relative proportions will increase steadily.

Year	Low Growth	Medium Growth	High Growth
2003	6%	6%	6%
2008	6%	6%	6%
2013	7%	6%	6%
2018	8%	7%	7%
2023	11%	10%	9%
2028	12%	11%	10%

Under the medium growth assumptions, there will be an increase in the number of elderly adults from 52 in 2003 to 134 in 2028, an increase of 82 persons. The number of elderly adults is affected slightly by the different mortality assumptions made in the three population projections. But, nevertheless, all three indicate a substantial increases in the number of tribal members who will become elderly adults during the 2003-2028 period. In relative terms, we expect that there will be increases for the proportion of elderly adults from 6 percent in 2003 to between 10-12 percent in 2028.

### Births

The current average of about 17 births per year is expected to increase during the next 25 years. Depending upon the growth assumptions, we expect that the average number of newborns will increase from 17 per year in 2003 to about 19 to 34 per year in the 2023-2028 period. Under the medium growth assumptions, the number of births will increase to 19 in the next five year period (2 more than at present), and then steadily increase to about 24 births per year in 2018 and thereafter. This represents a net gain of about 7 births a year, compared to the present, and means that the tribal population would be adding about 120 new members, due to births, during every 5-year period.

Year	Low Growth	Medium Growth	High Growth
2003-2008	16	19	25
2008-2013	18	22	28
2013-2018	19	23	29
2018-2023	19	24	31
2023-2028	19	24	34

### Deaths

Based on current mortality conditions and the relatively young age distribution of members of the Coquille Indian Tribe, we expect to see few deaths in coming years. We expect that there will be an average of 4 deaths per year for the next decade (2003-2013), about 5 deaths per years in the following decade (2013-2023), and 6 deaths per year in the 2023-2028 period. Making different assumptions about the relatively improvements in life expectancy at birth does not affect the prospects for average annual deaths. As shown in the following table, the number of average annual deaths does not vary for the three growth assumptions.

Year	Low Growth	Medium Growth	High Growth
2003-2008	4	4	4
2008-2013	4	4	4
2013-2018	5	5	5
2018-2023	5	5	5
2023-2028	6	6	6

## SPECIFIC POPULATION CHANGES

Although there are many population implications of the changes discussed above for the Coquille Indian Tribe, we describe in this section some likely outcomes for several specific issues: schooling, labor force, and health and the elderly.

### Schooling

The demographic effects for schooling are concentrated in the ages 5 to 24 years. We highlight trends for three type of schooling: (a) kindergarten-grade 8, which is ages 5 to 14 ages; (b) high school, grades 9-12, which is ages 14 to 18 years; and (c) college and vocational schooling, which we assume here is principally from ages 18 to 24 years. The Coquille Indian Tribe may have an increase in schooling programs for adults that are older than 25 years, and results for these adults are shown in Appendix C.

**K-8 Grades.** There will be steady increases in the number of children who are in kindergarten to grade 8 (K-8) in coming years. We estimate that there are 145 children in the K-8 grades in 2003. Although there may be some children who are in home schooling programs, we assume that most are enrolled in various public and private school programs. For the K-8 students, the two public issues that are often discussed are transportation needs (to get from home to school and back) and before- and after-school childcare programs. Although these population projections do not provide direct assessment of needs for transportation and childcare, the number provide a context for discussion of future trends. At the moment, under the medium growth assumptions, we expect that the number of children in the K-8 grades will increase from 145 in 2003 to 208 in 2028.

**9-12 Grades.** We estimate that there are 72 tribal members in the high school ages in 2003. The number of teenagers in the age group will decrease to 61 persons in the 9-12 grades in 2013, and then increase to 86 in 2028. The high school age group is an important formative time for younger persons. So, even though there are no large shifts in the number of tribal members who are in the high school ages during the next 25 years, it probably deserves to remain a critical issue for attention and discussion.

**College.** After the high school years, many younger persons seek further training through community colleges, universities, vocational or other apprenticeship programs, or military service. To the extent that the Coquille Indian Tribe wants to consider potential funding needs for younger tribal members who pursue further study, these population projections provide a broad basis for planning. At present, in 2003, there are 71 tribal members in the 18-24 age group (labeled "College School-Age" in Appendix C, although not necessarily all of these persons are actually enrolled in college). Based on the medium growth assumptions, there will be little change in the number of tribal members in the 18-24 age groups during the next 15 years. The number of tribal members who are age 18-24 years will remain in the range of 71 to 75 until 2018, after which there will be modest increases to 86 members in 2028. For planning purposes, this means that the Coquille Indian Tribe can concentrate on the type and cost of various possible schooling purposes because we do not expect to see major changes in the actual number of young adults in the 18 to 24 year age group for the near future.

### Labor Force

It is useful to consider two age groups within the labor force years: (a) younger adults, aged 25 to 44, who are beginning their employment and are perhaps still enrolled in job training programs and (b) older adults, age 45 to 64 years, who usually more established in their work and are likely to be considering retirement planning as they become older.

**Younger Adults.** Younger adults are typically in their early years of work and may be involved in training for new jobs and changing jobs as their employment interests and family needs change. These are also the ages in which most adults start families, purchase their first home, and have higher expenses for household

needs and children. In terms of social and economic effects of population changes, this is an age group that typically has keen interests in improving employment prospects, homeownership, and needs related to family formation.

Under the conditions of the medium growth assumptions, the number of tribal members who are aged 25-44 years will increase from 193 persons in 2003 to 339 in 2028. This is one of the fast growing population groups for the Coquille Indian Tribe.

**Older Adults.** Older adults become increasingly concerned with retirement planning as they become older. In the early years of older adults, they may have children in college and who are starting families, and this will create financial needs. Also, if unemployment occurs, this can be a tremendous problem for older adults because it is much more difficult to retrain in later years and employers are often not as interested in hiring older workers as they should be.

Under conditions of the medium growth assumptions, the number of tribal members who are in the older adult years, aged 45 to 64 years, will increase moderately, from 143 persons in 2003 to 225 persons in 2028.

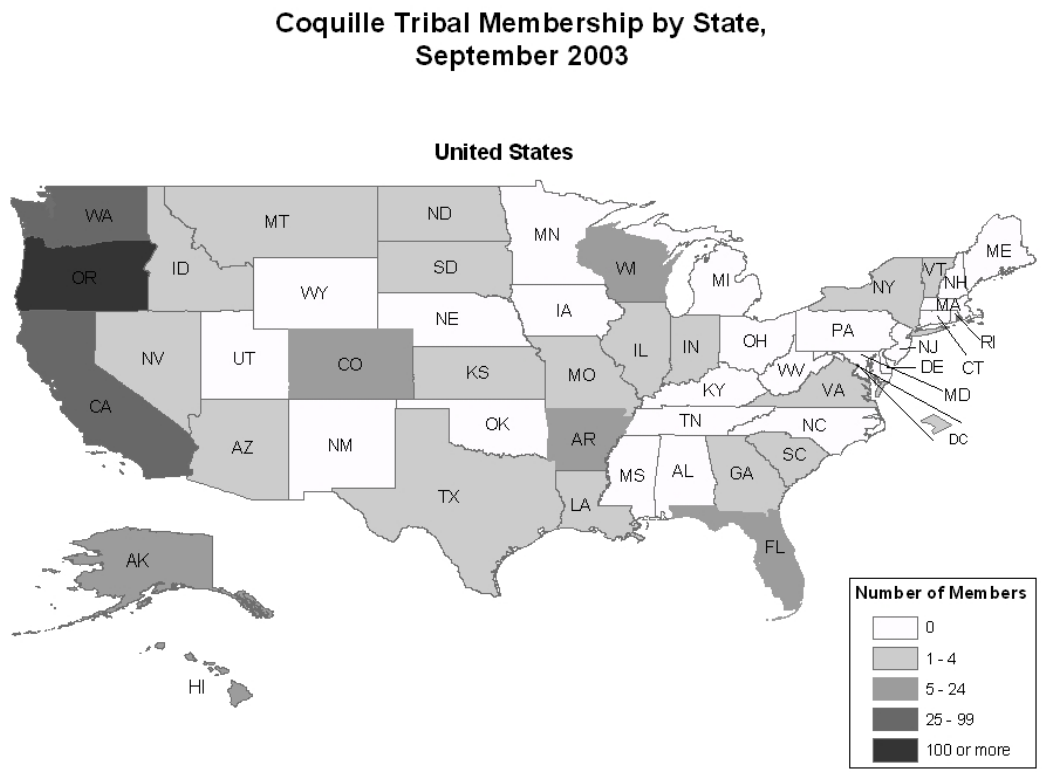
## **Elderly**

An issue of paramount importance for the Coquille Indian Tribe are possible future trends for the elderly. There are several reasons for the great interest in the elderly population. First and probably foremost, the health care needs (and costs) for the elderly are a major concern. Medical care, drugs, and possible assisted-living or nursing home costs can be major expenses for the elderly and would greatly affect tribal finances, if some costs were covered by the Coquille Indian Tribe. Second, there are other issues affected by the number of elderly. The housing needs of the elderly are different from other groups. Elderly persons, for example, generally want housing with easy access (and no stairs) and close to shops and services. Many elderly do not have access to private automobiles and want access to either public transportation or to have basic services close at hand.

There are variations in the needs of the elderly for different age groups of the elderly. Elderly adults aged 65 to 74 years are generally more active physically, often are still driving, and may maintain their own households. Persons 75-84 are often less active and may choose housing and transportation that provides some assistance. Persons aged 85 years and older are more likely than younger persons to live in assisted-living or nursing home facilities; these facilities are relatively costly.

At present, there are 52 tribal members who are 65 years of age and older. Of these members, 31 are 65-74 years, 14 are 75-84, and 7 are 85 years of age and older. During the next 25 years, the number of tribal members who are over 65 years will more than double, from 52 persons in 2003 to 134 persons in 2028. The increases will be entirely in the age 65 to 84 years. We expect that the number of tribal members who are 85 years of age and older will fluctuate in the range of 4 to 7 persons during 2003-2028, but that there will not be major increases in the numbers. (Recall, however, that the population numbers for tribal members are very small and the actual numbers could vary somewhat depending upon the frailty or excellent health of elderly tribal members.) We expect that that number of tribal members who are 75 to 84 years will more than double from 14 persons in 2003 to 35 persons in 2028. And, finally, we expect that the number of tribal members aged 65-74 years will triple from 31 persons in 2003 to 92 persons in 2028. Beyond 2028, I should point out, the elderly population of the Coquille Indian Tribe will continue to age and, eventually, in 2030 and beyond, there will be an increase number of tribal members who are over 75 years and, in the long run, over 85 years.

Figure 1. Map of Coquille Tribal Membership for U.S. States, September 2003.

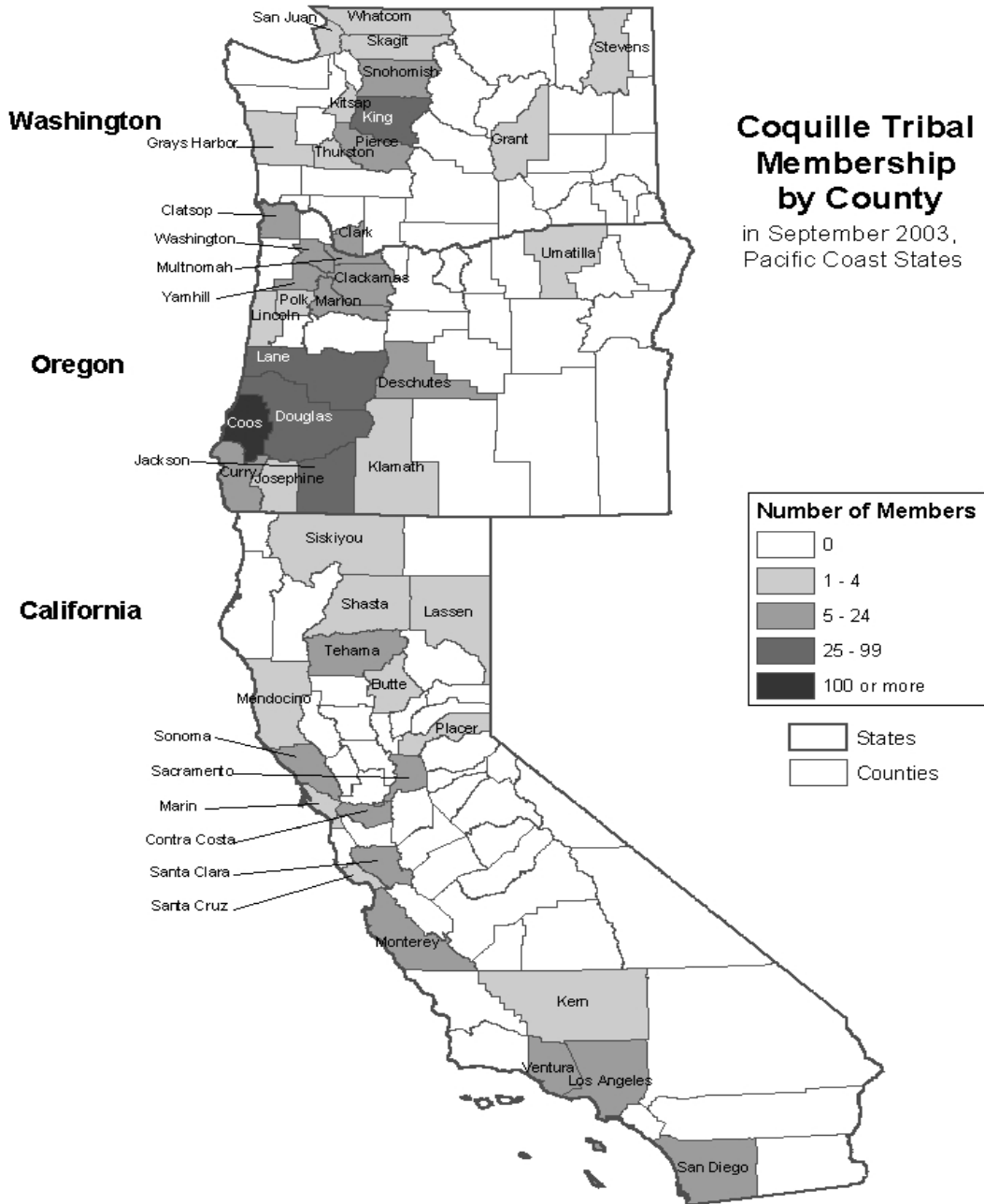


Note: The map is not drawn to scale.

Source:  
U.S. Census Bureau, Geography Division

Prepared by:  
Population Research Center,  
Portland State University

Figure 2. Map of Coquille Tribal Membership for Counties of Oregon, Washington and California, September 2003.



Note: Only the counties with one or more Coquille Tribal members are labeled.  
 Source: WA Geographic Information Council; WA Office of Financial Management,  
 OR Geospatial Enterprise Office; OR Bureau of Land Management,  
 CA Spatial Information Library; CA Department of Forestry and Fire Protection

Prepared by:  
 Population Research Center,  
 Portland State University

## **APPENDICES**

### **A. Data Sources**

### **B. Population Projection Model**

### **C. Supporting Tables**

## **A. Data Sources**

Data sources for this population study of the Coquille Indian Tribe include both official statistics from government agencies and tribal records. The population count of tribal members is taken from the Coquille Indian Tribe records for September 2, 2003. The records include date of birth of 405 female members and 399 male members. In order to develop a population count for the Tribe as of December 31, 2003, I relied on the date of birth and gender to calculate the population by age and sex. Because there is an average of 2.75 deaths per year, I assumed that there was one death between September 2<sup>nd</sup> and December 31<sup>st</sup>. The Coquille Indian Tribe has enrolled almost 17 children each year for the past 12 years. There were four newborns registered in 2003 by September 2<sup>nd</sup>; I assume that there were some earlier births that had not been registered by September 2<sup>nd</sup> and there were additional births in the period before December 31<sup>st</sup>. Assuming that there were 17 children born during 2003, I added an additional 13 newborns, six males and seven females, to the population less than one year of age to the tribal population count as of December 31, 2003. The combination of subtracting one death and adding 13 newborns resulted in an adjusted tribal population of 816 as of December 31, 2003.

## **B. Population Projection Model**

This report relies on a cohort-component approach for projecting the population of Coquille Indian Tribe. It is based on the age-sex composition of the Coquille Indian Tribe population on December 31, 2003 and provides a projection to 2028 (the actual projection is shown in Appendix C.). The cohort-component method requires fairly extensive assumptions for modeling the population. It is used here to provide information about changes in the age-sex composition of the population.

The component technique for population projections relies on separating population change into its components and projecting each component independently. Projecting the components (births, deaths, and migration) separately requires a model of the population by age and sex that simulates actual processes of change. In such a model, the age and sex structure of the base population interacts with the projected fertility, mortality, and migration rates to produce projected age and sex cohorts as well as population totals.

### **Rationale for Model**

We use a cohort-component technique here for two reasons. First, the components of population change are usually very age sensitive. We want to model the components of change for Coquille Indian Tribe between 1990 and 2000 and to double-check the forecasts from the ratio method for the near future.

The second reason for selecting a cohort-component model is that it produces projections by age and sex. We provide results in the Appendix that offer age and sex detail for projections to 2040. These projections may be helpful for city planning in coming decades.

### **Overview of the Model**

The cohort-component model is demographically fairly simple. The baseline data used here are from the December 31, 2003 population register for the Coquille Indian Tribe. The register gives counts by age and sex for tribal members. The baseline population is survived forward five years using survival rates to determine the number of survivors in the population. Fertility rates are applied to the female population in the childbearing ages to determine the number of births during the five-year period. These births are then survived the appropriate number of years and become the population aged 0 to 4 years. Finally, we assume that there are no migrants who are added to and/or subtracted from the tribal membership. This entire process is repeated for each five-year period.

For the fertility component, we use age-specific fertility rates for Oregon residents.

For the mortality component, we calculate age-specific mortality rates for males and females based on recent mortality tables for Oregon. We assume that age-specific mortality rates for Coquille Indian Tribe continue to decrease, with improvements in life expectancy similar to those forecast for Oregon.

### **Mortality**

The average number of deaths in recent years for the Coquille Indian Tribe, taking its age and sex composition into account, suggests that members have mortality levels similar to those for Oregon residents. This means that life expectancy at birth for current members is about 73.9 years for males and 79.6 years for females. For medium-growth, I made assumptions for future mortality trends that are the same as those years for the U.S. Census Bureau's national population projections: life expectancy for males will increase by .176 years each year and life expectancy for females will increase by .109 years each year between 2000 and 2050. This assumption means that the present 5.7 gap in life expectancy between males and females will narrow over time.

For low-growth, I assumed that life expectancy for males will improve by .158 years each year and for females will improve by .098 years each year. For high-growth, I assumed that life expectancy for males will improve by .194 years each year and for females will improve by .120 years each year. As with the medium-growth assumptions,

these assumptions are similar to those made by the U.S. Census Bureau for national population projections for the 2000 to 2050 period.

To summarize, the mortality assumptions for this population study assume gains in life expectancy at birth between 2000 and 2050 as follows:

Gender	Growth Assumptions	2003	2050
Males	Low	73.86	81.76
	Medium	73.86	82.64
	High	73.86	83.56
Females	Low	79.57	84.47
	Medium	79.57	85.02
	High	79.57	85.57

For the final year (2028) and for intermediate years of the projection, life expectancy and mortality values were interpolated from the beginning 2003 and final 2050 values.

### **Fertility**

As mentioned earlier, we assume that the fertility levels for adult members of the Coquille Indian Tribe are similar to those for other Oregon residents. We assume that tribal members have the same age-specific fertility rates as Oregon residents in 2000. Age-specific fertility rates are the number of children born, per 1,000 women, in five-year age groups, starting in the 15-19 age group and extending to the 40-44 age group. The sum of all age-specific fertility rates is the total fertility rate (TFR), which is defined as the average number of children that a woman would have during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. Based on recent fertility data for Oregon residents, we assume that the current and future TFR for Coquille Indian Tribe is 2.02. Although there have been relatively few systematic studies of the fertility rates for American Indians, the available studies suggest that their fertility rates are not greatly different than the overall average for the population.

### **Indian Descent for Offspring**

Special methods and assumptions are needed for population projections for the Coquille Indian Tribe because not all adult members have children with other tribal members. We can illustrate the need for special methods by considering two extreme possibilities. Let us assume that each adult tribal member has two children by the end of their childbearing years: this means, for example, that each adult member will have had two children by the time they are, say, 50 years of age.

In one extreme situation, we assume that every tribal member has a partner who is also a tribal member. In this case, two tribal adults will have a total of two children by the time that they are fifty old.

In a second extreme situation, we assume that every tribal member has a partner who is not a tribal member. This circumstance will result in two tribal members (each with partner outside of the Coquille Indian Tribe) having four children by the time that they are fifty years old. The situation in which all tribal members have partners outside of the Coquille Indian Tribe means that there are approximately twice as many possible tribal offspring compared to the case of all tribal members having partners within the Coquille Indian Tribe.

The Indian descent of offspring is further complicated by variations in which offspring of tribal members enroll in the Coquille Indian Tribe. If both parents are Coquille Indian Tribal members, it seems reasonable and highly likely that offspring would enroll in the Coquille Indian Tribe. If only one parent is a Coquille Indian Tribal member, it is not certain that all offspring would become enrolled members. As I understand the current Coquille Indian Tribal rules, membership is based on lineal descent and all offspring of a tribal member are eligible to enroll in the

Coquille Indian Tribe. There are reasons, however, why some offspring may not seek to enroll. Some non-member parents, for example, may prefer not to have their offspring enrolled, even though their partner is a tribal member.

We currently lack information on the partners of tribal members and whether they are tribal members. We do not have complete records of all offspring and whether they enroll in the Coquille Indian Tribe. In the absence of this information, I developed some estimates that are used for the population projections. I developed the following procedures:

- To begin, I examined the annual number of children and youth who have been enrolled in the Coquille Indian Tribe over the past 12 years, or during 1990 to 2003. Based on average fertility rates for other American Indian groups, I expect that the average number of children born to adults, over their childbearing years, would be about two children. Available records for the Coquille Indian Tribe for 1990 to 2003, however, show that the average adult is having 2.8 children, considerably higher than expected.
- Recalling that the number of children enrolled in the Coquille Indian Tribe will be greater if members have partners outside of the tribe, I decided to estimate the proportion who may have non-tribal partners. This proportion can be estimated once one makes an assumption of the likelihood that offspring – depending upon the tribal membership of their parents – will be enrolled in the Coquille Indian Tribe. For offspring who have parents who are both tribal members, let us assume that all offspring are enrolled in the Coquille Indian Tribe. For offspring who have only one parent who is a tribal member, let us assume that 3 out of 4, or 75 percent, are enrolled in the Coquille Indian Tribe.
- Given the preceding assumptions about the likelihood of tribal membership for offspring and the average number of 2.8 children enrolled each year, I calculate that about 20 percent of adult tribal members have offspring with a partner who is also a tribal member. The other 80 percent of adult tribal members have offspring with a partner who is not a tribal member.

I incorporate the above assumptions into the population projection model. It should be noted that the assumptions would be easy to change if more accurate data were to become available. At the moment, these assumptions have two advantages. First, they are consistent with the known data on the number of children and youth who are enrolled as tribal members during the past 12 years. And second, they make reasonable and realistic assumptions, it seems to me, about the likelihood of adult partnership among tribal members and the chances of tribal enrollment for their offspring.

## C. Supporting Tables

## C.1. Low Growth Assumptions

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

FERTILITY

Sex ratio at birth: 105.0 males per 100 females

Distribution by age of fertility (percent)

Age	2003	2008	2013	2018	2023	2028
10-14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15-19	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
20-24	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%
25-29	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%
30-34	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%
35-39	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
40-44	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
45-49	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Age-specific fertility schedule (rates per 1,000 women)

Age	2003	2008	2013	2018	2023	2028
10-14	0.18	0.18	0.18	0.18	0.18	0.18
15-19	36.03	36.03	36.03	36.03	36.03	36.03
20-24	89.86	89.86	89.86	89.86	89.86	89.86
25-29	90.96	90.96	90.96	90.96	90.96	90.96
30-34	75.87	75.87	75.87	75.87	75.87	75.87
35-39	55.84	55.84	55.84	55.84	55.84	55.84
40-44	29.86	29.86	29.86	29.86	29.86	29.86
45-49	5.41	5.41	5.41	5.41	5.41	5.41
TFR	1.92	1.92	1.92	1.92	1.92	1.92
GRR	0.94	0.94	0.94	0.94	0.94	0.94
NRR	0.93	0.93	0.93	0.93	0.93	0.93
Mean Age	26.75	27.12	28.39	29.22	29.48	29.42

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

MORTALITY

Mortality Measure	2003	2008	2013	2018	2023	2028
e(0)						
Females	79.57	80.16	80.73	81.28	81.80	82.31
Males	73.86	74.80	75.69	76.55	77.38	78.17
Both	76.72	77.48	78.21	78.92	79.59	80.24
IMR (per 1,000)						
Females	4.69	4.26	3.87	3.53	3.22	2.95
Males	10.26	9.04	7.97	7.05	6.24	5.54
Both	7.54	6.70	5.97	5.33	4.77	4.28

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION PROJECTION NUMBERS

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	47	38	43	46	47	47
5 - 9	33	47	38	43	46	47
10 - 14	43	33	47	38	43	46
15 - 19	49	43	33	47	38	43
20 - 24	45	49	43	33	47	38
25 - 29	29	45	49	43	33	47
30 - 34	23	29	45	49	43	33
35 - 39	14	23	29	45	49	43
40 - 44	20	14	23	29	45	49
45 - 49	34	20	14	23	29	45
50 - 54	17	34	20	14	23	29
55 - 59	16	17	33	19	14	22
60 - 64	8	16	16	32	19	13
65 - 69	10	8	15	16	31	18
70 - 74	5	9	7	13	14	29
75 - 79	5	4	7	6	11	12
80 - 84	0	4	3	5	4	9
85+	6	3	3	3	4	4
<b>Total</b>	<b>404</b>	<b>433</b>	<b>467</b>	<b>503</b>	<b>538</b>	<b>572</b>
<b>Males</b>						
0 - 4	43	40	45	48	49	49
5 - 9	41	43	40	45	48	49
10 - 14	44	41	43	40	45	48
15 - 19	41	44	41	43	39	45
20 - 24	42	41	44	41	43	39
25 - 29	28	42	41	44	41	43
30 - 34	27	28	42	41	44	41
35 - 39	24	27	28	42	41	44
40 - 44	28	24	27	28	42	41
45 - 49	30	28	24	27	28	41
50 - 54	18	29	27	23	26	27
55 - 59	10	17	28	26	23	26
60 - 64	10	9	16	27	25	22
65 - 69	11	9	8	15	25	23
70 - 74	5	9	7	7	13	21
75 - 79	8	4	7	6	5	10
80 - 84	1	5	2	4	4	4
85+	1	1	2	2	3	3
<b>Total</b>	<b>412</b>	<b>440</b>	<b>472</b>	<b>507</b>	<b>541</b>	<b>574</b>
<b>Grand Total</b>	<b>816</b>	<b>873</b>	<b>940</b>	<b>1,010</b>	<b>1,080</b>	<b>1,146</b>

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL POPULATION CHANGE (average annual change in previous 5 years)

Component	2008	2013	2018	2023	2028
Population size	11	13	14	14	13
Yearly births	16	18	19	19	19
Yearly deaths	4	4	5	5	6
Natural Increase	11	13	14	14	13
Net yearly migrants	0	0	0	0	0
Rate of change (per 1,000):					
Birth rate	18.49	19.58	19.28	18.43	17.33
Death rate	4.91	4.95	4.85	5.11	5.34
Natural increase	13.58	14.63	14.43	13.33	11.99
Net Migration	0.00	0.00	0.00	0.00	0.00
Population increase	13.58	14.63	14.43	13.33	11.99

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL CHANGE BY AGE GROUP (average annual percent in previous 5 years)

Age	2008	2013	2018	2023	2028
<b>Females</b>					
0 - 4	-4.3%	2.6%	1.1%	0.5%	0.0%
5 - 9	7.1%	-4.3%	2.6%	1.1%	0.5%
10 - 14	-5.3%	7.1%	-4.3%	2.6%	1.1%
15 - 19	-2.6%	-5.3%	7.1%	-4.3%	2.6%
20 - 24	1.7%	-2.6%	-5.3%	7.1%	-4.3%
25 - 29	8.8%	1.7%	-2.6%	-5.3%	7.1%
30 - 34	4.6%	8.8%	1.7%	-2.6%	-5.3%
35 - 39	9.9%	4.6%	8.8%	1.7%	-2.6%
40 - 44	-7.2%	9.9%	4.6%	8.8%	1.7%
45 - 49	-10.7%	-7.2%	9.9%	4.6%	8.8%
50 - 54	13.7%	-10.7%	-7.2%	9.9%	4.6%
55 - 59	0.9%	13.7%	-10.7%	-7.1%	9.9%
60 - 64	13.3%	0.9%	13.7%	-10.6%	-7.1%
65 - 69	-5.6%	13.4%	1.0%	13.8%	-10.6%
70 - 74	11.7%	-5.4%	13.5%	1.1%	13.9%
75 - 79	-4.0%	12.0%	-5.2%	13.7%	1.4%
80 - 84	0.0%	-3.7%	12.3%	-4.9%	14.0%
85+	-15.7%	1.1%	-1.2%	7.0%	0.2%
Total	1.4%	1.5%	1.5%	1.4%	1.2%
<b>Males</b>					
0 - 4	-1.7%	2.6%	1.2%	0.5%	0.0%
5 - 9	0.9%	-1.7%	2.6%	1.2%	0.5%
10 - 14	-1.4%	0.9%	-1.6%	2.6%	1.2%
15 - 19	1.4%	-1.4%	0.9%	-1.6%	2.6%
20 - 24	-0.5%	1.4%	-1.4%	0.9%	-1.6%
25 - 29	8.1%	-0.5%	1.4%	-1.4%	0.9%
30 - 34	0.7%	8.1%	-0.5%	1.4%	-1.4%
35 - 39	2.3%	0.7%	8.1%	-0.5%	1.4%
40 - 44	-3.2%	2.3%	0.7%	8.1%	-0.5%
45 - 49	-1.6%	-3.2%	2.3%	0.7%	8.1%
50 - 54	9.8%	-1.5%	-3.1%	2.4%	0.7%
55 - 59	11.0%	9.9%	-1.5%	-3.1%	2.4%
60 - 64	-1.4%	11.1%	10.0%	-1.3%	-3.0%
65 - 69	-4.3%	-1.2%	11.3%	10.2%	-1.2%
70 - 74	11.8%	-3.9%	-0.9%	11.6%	10.5%
75 - 79	-15.7%	12.2%	-3.6%	-0.5%	12.0%
80 - 84	31.9%	-15.3%	12.7%	-3.1%	-0.1%
85+	-4.2%	21.3%	-3.9%	6.2%	0.6%
Total	1.3%	1.4%	1.4%	1.3%	1.2%
<b>Grand Total</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>1.2%</b>

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

PROPORTIONS OF TOTAL POPULATION BY SEX

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	11.6%	8.7%	9.2%	9.1%	8.7%	8.2%
5 - 9	8.2%	10.8%	8.1%	8.6%	8.5%	8.2%
10 - 14	10.6%	7.6%	10.0%	7.5%	8.0%	8.0%
15 - 19	12.1%	9.9%	7.1%	9.3%	7.0%	7.5%
20 - 24	11.1%	11.3%	9.2%	6.6%	8.7%	6.6%
25 - 29	7.2%	10.4%	10.5%	8.5%	6.1%	8.2%
30 - 34	5.7%	6.7%	9.6%	9.7%	8.0%	5.8%
35 - 39	3.5%	5.3%	6.2%	8.9%	9.1%	7.5%
40 - 44	5.0%	3.2%	4.9%	5.7%	8.3%	8.5%
45 - 49	8.4%	4.6%	3.0%	4.5%	5.3%	7.8%
50 - 54	4.2%	7.8%	4.2%	2.7%	4.2%	5.0%
55 - 59	4.0%	3.9%	7.1%	3.9%	2.5%	3.9%
60 - 64	2.0%	3.6%	3.5%	6.4%	3.5%	2.3%
65 - 69	2.5%	1.7%	3.2%	3.1%	5.7%	3.2%
70 - 74	1.2%	2.1%	1.5%	2.7%	2.6%	5.0%
75 - 79	1.2%	0.9%	1.6%	1.1%	2.1%	2.1%
80 - 84	0.0%	0.8%	0.6%	1.1%	0.8%	1.5%
85+	1.5%	0.6%	0.6%	0.5%	0.7%	0.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Males</b>						
0 - 4	10.4%	9.0%	9.5%	9.4%	9.0%	8.5%
5 - 9	10.0%	9.8%	8.4%	8.9%	8.8%	8.5%
10 - 14	10.7%	9.3%	9.1%	7.8%	8.3%	8.3%
15 - 19	10.0%	10.0%	8.7%	8.5%	7.3%	7.8%
20 - 24	10.2%	9.3%	9.3%	8.1%	7.9%	6.9%
25 - 29	6.8%	9.5%	8.6%	8.6%	7.5%	7.4%
30 - 34	6.6%	6.3%	8.9%	8.0%	8.1%	7.1%
35 - 39	5.8%	6.1%	5.9%	8.2%	7.5%	7.6%
40 - 44	6.8%	5.4%	5.7%	5.5%	7.7%	7.1%
45 - 49	7.3%	6.3%	5.0%	5.2%	5.1%	7.2%
50 - 54	4.4%	6.7%	5.8%	4.6%	4.8%	4.7%
55 - 59	2.4%	3.9%	6.0%	5.2%	4.2%	4.5%
60 - 64	2.4%	2.1%	3.4%	5.3%	4.6%	3.8%
65 - 69	2.7%	2.0%	1.8%	2.9%	4.5%	4.0%
70 - 74	1.2%	2.1%	1.6%	1.4%	2.3%	3.7%
75 - 79	1.9%	0.8%	1.4%	1.1%	1.0%	1.7%
80 - 84	0.2%	1.1%	0.5%	0.9%	0.7%	0.6%
85+	0.2%	0.2%	0.5%	0.4%	0.5%	0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**C.1. Low Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION FOR SELECTED AGE GROUPS

Age	2003	2008	2013	2018	2023	2028
<b>Numbers</b>						
0-14	251	241	255	259	277	285
15-24	177	177	161	164	167	165
25-44	193	231	283	320	336	339
45-64	143	170	179	191	185	225
65+	52	54	62	77	114	133
75+	21	20	25	26	31	41
85+	7	4	5	5	6	7
<b>School-Age</b>						
K-8	145	147	151	149	163	170
9-12	72	68	61	71	63	71
K-12	217	216	211	220	226	241
College	71	70	66	67	71	70
<b>Percentages</b>						
0-14	30.8%	27.6%	27.2%	25.6%	25.7%	24.9%
15-24	21.7%	20.2%	17.1%	16.2%	15.5%	14.4%
25-44	23.7%	26.5%	30.1%	31.6%	31.1%	29.6%
45-64	17.5%	19.4%	19.0%	19.0%	17.2%	19.6%
65+	6.4%	6.2%	6.6%	7.6%	10.5%	11.6%
75+	2.6%	2.3%	2.6%	2.5%	2.9%	3.6%
85+	0.9%	0.4%	0.6%	0.5%	0.6%	0.6%
<b>School-Age</b>						
K-8	17.8%	16.9%	16.0%	14.7%	15.1%	14.8%
9-12	8.8%	7.8%	6.5%	7.0%	5.8%	6.2%
K-12	26.5%	24.7%	22.5%	21.7%	20.9%	21.0%
College	8.7%	8.0%	7.0%	6.7%	6.6%	6.1%
<b>Dependency ratios (per 100):</b>						
Youth	80.61	66.87	60.06	59.62	57.99	58.20
Elderly	12.29	11.04	11.31	13.10	18.62	20.68
Total	92.91	77.91	71.37	72.72	76.61	78.89

**Definitions for Selected Age Groups and Ratios:**

- K-8: equals .5\*5, ages 6-13, and .5\*14.
- 9-12: equals .5\*14, ages 15-17, and .5\*18.
- K-12: equals .5\*5, ages 6 to 17, and .5\*18.
- College: equals .5\*18, 19, 20, 21, and .5\*22.
- Youth: 100 times ratio of <20 to 20-64
- Elderly: 100 times ratio of 65+ to 20-64
- Total: youth plus elderly ratios

## C.2. Medium-Growth Assumptions

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

FERTILITY

Sex ratio at birth: 105.0 males per 100 females

Distribution by age of fertility (percent)

Age	2003	2008	2013	2018	2023	2028
10-14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15-19	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
20-24	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%
25-29	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%
30-34	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%
35-39	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
40-44	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
45-49	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Age-specific fertility schedule (rates per 1,000 women)

Age	2003	2008	2013	2018	2023	2028
10-14	0.18	0.18	0.18	0.18	0.18	0.18
15-19	37.91	37.91	37.91	37.91	37.91	37.91
20-24	94.54	94.54	94.54	94.54	94.54	94.54
25-29	95.70	95.70	95.70	95.70	95.70	95.70
30-34	79.82	79.82	79.82	79.82	79.82	79.82
35-39	58.75	58.75	58.75	58.75	58.75	58.75
40-44	31.41	31.41	31.41	31.41	31.41	31.41
45-49	5.69	5.69	5.69	5.69	5.69	5.69
TFR	2.02	2.02	2.02	2.02	2.02	2.02
GRR	0.99	0.99	0.99	0.99	0.99	0.99
NRR	0.98	0.98	0.98	0.98	0.98	0.98
Mean Age	26.75	27.12	28.39	29.22	29.27	28.88

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

MORTALITY

Mortality Measure	2003	2008	2013	2018	2023	2028
e(0)						
Females	79.57	80.21	80.83	81.42	82.00	82.55
Males	73.86	74.93	75.96	76.94	77.87	78.76
Both	76.72	77.57	78.40	79.18	79.94	80.66
IMR (per 1,000)						
Females	4.69	4.22	3.81	3.44	3.12	2.83
Males	10.26	8.87	7.68	6.66	5.80	5.05
Both	7.54	6.60	5.79	5.09	4.49	3.97

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION PROJECTION NUMBERS

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	47	46	52	56	58	60
5 - 9	33	47	46	52	56	57
10 - 14	43	33	47	46	52	56
15 - 19	49	43	33	47	46	52
20 - 24	45	49	43	33	47	46
25 - 29	29	45	49	43	33	47
30 - 34	23	29	45	49	43	33
35 - 39	14	23	29	45	49	43
40 - 44	20	14	23	29	45	49
45 - 49	34	20	14	23	29	45
50 - 54	17	34	20	14	23	29
55 - 59	16	17	33	19	14	22
60 - 64	8	16	16	32	19	13
65 - 69	10	8	15	16	31	18
70 - 74	5	9	7	13	14	29
75 - 79	5	4	7	6	11	12
80 - 84	0	4	3	5	4	9
85+	6	3	3	3	4	4
<b>Total</b>	<b>404</b>	<b>442</b>	<b>485</b>	<b>531</b>	<b>577</b>	<b>623</b>
<b>Males</b>						
0 - 4	43	48	55	58	60	62
5 - 9	41	43	48	55	58	60
10 - 14	44	41	43	48	55	58
15 - 19	41	44	41	43	48	55
20 - 24	42	41	44	41	43	48
25 - 29	28	42	41	44	41	43
30 - 34	27	28	42	41	44	41
35 - 39	24	27	28	42	41	44
40 - 44	28	24	27	28	42	41
45 - 49	30	28	24	27	28	41
50 - 54	18	29	27	23	26	27
55 - 59	10	17	28	26	23	26
60 - 64	10	9	16	27	25	22
65 - 69	11	9	8	15	25	23
70 - 74	5	9	7	7	13	22
75 - 79	8	4	7	6	6	10
80 - 84	1	5	2	4	4	4
85+	1	1	2	2	3	3
<b>Total</b>	<b>412</b>	<b>449</b>	<b>491</b>	<b>536</b>	<b>582</b>	<b>629</b>
<b>Grand Total</b>	<b>816</b>	<b>890</b>	<b>976</b>	<b>1,067</b>	<b>1,159</b>	<b>1,252</b>

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL POPULATION CHANGE (average annual change in previous 5 years)

Component	2008	2013	2018	2023	2028
Population size	15	17	18	18	19
Yearly births	19	22	23	24	24
Yearly deaths	4	4	5	5	6
Natural Increase	15	17	18	18	19
Net yearly migrants	0	0	0	0	0
Rate of change (per 1,000):					
Birth rate	22.28	23.16	22.40	21.26	20.32
Death rate	4.89	4.81	4.59	4.73	4.84
Natural increase	17.39	18.35	17.81	16.54	15.48
Net Migration	0.00	0.00	0.00	0.00	0.00
Population increase	17.39	18.35	17.81	16.54	15.48

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL CHANGE BY AGE GROUP (average annual percent in previous 5 years)

Age	2008	2013	2018	2023	2028
<b>Females</b>					
0 - 4	-0.4%	2.6%	1.1%	0.7%	0.7%
5 - 9	7.1%	-0.4%	2.6%	1.1%	0.7%
10 - 14	-5.3%	7.1%	-0.4%	2.6%	1.1%
15 - 19	-2.6%	-5.3%	7.1%	-0.4%	2.6%
20 - 24	1.7%	-2.6%	-5.3%	7.1%	-0.4%
25 - 29	8.8%	1.7%	-2.6%	-5.3%	7.1%
30 - 34	4.6%	8.8%	1.7%	-2.6%	-5.3%
35 - 39	9.9%	4.6%	8.8%	1.7%	-2.6%
40 - 44	-7.2%	9.9%	4.6%	8.8%	1.7%
45 - 49	-10.7%	-7.2%	9.9%	4.6%	8.8%
50 - 54	13.7%	-10.7%	-7.2%	9.9%	4.6%
55 - 59	0.9%	13.7%	-10.7%	-7.1%	10.0%
60 - 64	13.3%	0.9%	13.7%	-10.6%	-7.1%
65 - 69	-5.6%	13.4%	1.0%	13.8%	-10.6%
70 - 74	11.7%	-5.4%	13.5%	1.2%	14.0%
75 - 79	-4.0%	12.0%	-5.1%	13.8%	1.4%
80 - 84	0.0%	-3.7%	12.4%	-4.8%	14.1%
85+	-15.7%	1.1%	-1.2%	7.0%	0.3%
Total	1.8%	1.9%	1.8%	1.7%	1.5%
<b>Males</b>					
0 - 4	2.3%	2.6%	1.2%	0.7%	0.7%
5 - 9	0.9%	2.3%	2.6%	1.2%	0.7%
10 - 14	-1.4%	0.9%	2.3%	2.6%	1.2%
15 - 19	1.4%	-1.4%	0.9%	2.3%	2.6%
20 - 24	-0.5%	1.4%	-1.4%	0.9%	2.3%
25 - 29	8.1%	-0.5%	1.4%	-1.4%	0.9%
30 - 34	0.7%	8.1%	-0.5%	1.4%	-1.4%
35 - 39	2.3%	0.7%	8.1%	-0.5%	1.4%
40 - 44	-3.2%	2.3%	0.7%	8.1%	-0.5%
45 - 49	-1.6%	-3.2%	2.3%	0.7%	8.1%
50 - 54	9.8%	-1.5%	-3.1%	2.4%	0.8%
55 - 59	11.0%	9.9%	-1.4%	-3.0%	2.4%
60 - 64	-1.4%	11.1%	10.1%	-1.3%	-2.9%
65 - 69	-4.3%	-1.1%	11.4%	10.3%	-1.1%
70 - 74	11.8%	-3.9%	-0.8%	11.7%	10.6%
75 - 79	-15.7%	12.3%	-3.5%	-0.4%	12.1%
80 - 84	31.9%	-15.2%	12.8%	-3.0%	0.1%
85+	-4.2%	21.4%	-3.8%	6.4%	0.8%
Total	1.7%	1.8%	1.8%	1.6%	1.5%
Grand Total	1.7%	1.8%	1.8%	1.7%	1.5%

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

PROPORTIONS OF TOTAL POPULATION BY SEX

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	11.6%	10.5%	10.8%	10.5%	10.0%	9.6%
5 - 9	8.2%	10.6%	9.5%	9.9%	9.6%	9.2%
10 - 14	10.6%	7.5%	9.7%	8.7%	9.1%	8.9%
15 - 19	12.1%	9.7%	6.8%	8.8%	8.0%	8.4%
20 - 24	11.1%	11.1%	8.9%	6.2%	8.1%	7.4%
25 - 29	7.2%	10.2%	10.1%	8.1%	5.7%	7.5%
30 - 34	5.7%	6.6%	9.3%	9.2%	7.4%	5.3%
35 - 39	3.5%	5.2%	6.0%	8.5%	8.5%	6.9%
40 - 44	5.0%	3.2%	4.7%	5.4%	7.8%	7.8%
45 - 49	8.4%	4.5%	2.9%	4.3%	5.0%	7.2%
50 - 54	4.2%	7.6%	4.1%	2.6%	3.9%	4.6%
55 - 59	4.0%	3.8%	6.8%	3.7%	2.4%	3.6%
60 - 64	2.0%	3.5%	3.4%	6.1%	3.3%	2.1%
65 - 69	2.5%	1.7%	3.0%	2.9%	5.4%	2.9%
70 - 74	1.2%	2.0%	1.4%	2.5%	2.5%	4.6%
75 - 79	1.2%	0.9%	1.5%	1.1%	2.0%	2.0%
80 - 84	0.0%	0.8%	0.6%	1.0%	0.7%	1.4%
85+	1.5%	0.6%	0.6%	0.5%	0.7%	0.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Males</b>						
0 - 4	10.4%	10.7%	11.2%	10.8%	10.3%	9.9%
5 - 9	10.0%	9.6%	9.8%	10.2%	10.0%	9.6%
10 - 14	10.7%	9.1%	8.7%	9.0%	9.4%	9.2%
15 - 19	10.0%	9.8%	8.3%	8.0%	8.3%	8.7%
20 - 24	10.2%	9.1%	8.9%	7.6%	7.4%	7.6%
25 - 29	6.8%	9.3%	8.3%	8.2%	7.0%	6.8%
30 - 34	6.6%	6.2%	8.5%	7.6%	7.5%	6.5%
35 - 39	5.8%	6.0%	5.7%	7.8%	7.0%	6.9%
40 - 44	6.8%	5.3%	5.5%	5.2%	7.1%	6.4%
45 - 49	7.3%	6.2%	4.8%	5.0%	4.7%	6.6%
50 - 54	4.4%	6.6%	5.5%	4.3%	4.5%	4.3%
55 - 59	2.4%	3.9%	5.8%	4.9%	3.9%	4.1%
60 - 64	2.4%	2.1%	3.3%	5.0%	4.3%	3.5%
65 - 69	2.7%	2.0%	1.7%	2.8%	4.3%	3.7%
70 - 74	1.2%	2.0%	1.5%	1.3%	2.2%	3.5%
75 - 79	1.9%	0.8%	1.4%	1.1%	1.0%	1.6%
80 - 84	0.2%	1.1%	0.5%	0.8%	0.6%	0.6%
85+	0.2%	0.2%	0.5%	0.4%	0.5%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**C.2. Medium Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION FOR SELECTED AGE GROUPS

Age	2003	2008	2013	2018	2023	2028
<b>Numbers</b>						
0-14	251	258	291	315	339	353
15-24	177	177	161	164	184	201
25-44	193	231	283	320	336	339
45-64	143	170	179	192	186	225
65+	52	54	62	77	114	134
75+	21	20	25	26	32	42
85+	7	4	5	5	7	7
<b>School-Age</b>						
K-8	145	147	166	181	199	208
9-12	72	68	61	72	77	86
K-12	217	216	226	254	275	294
College	71	75	71	72	82	86
<b>Percentages</b>						
0-14	30.8%	29.0%	29.9%	29.5%	29.2%	28.2%
15-24	21.7%	19.9%	16.5%	15.3%	15.9%	16.1%
25-44	23.7%	26.0%	29.0%	30.0%	29.0%	27.1%
45-64	17.5%	19.0%	18.3%	18.0%	16.0%	18.0%
65+	6.4%	6.1%	6.4%	7.2%	9.9%	10.7%
75+	2.6%	2.2%	2.5%	2.4%	2.7%	3.3%
85+	0.9%	0.4%	0.5%	0.4%	0.6%	0.5%
<b>School-Age</b>						
K-8	17.8%	16.6%	17.0%	17.0%	17.2%	16.6%
9-12	8.8%	7.7%	6.2%	6.8%	6.6%	6.9%
K-12	26.5%	24.2%	23.2%	23.8%	23.8%	23.5%
College	8.7%	8.4%	7.3%	6.8%	7.1%	6.9%
<b>Dependency ratios (per 100):</b>						
Youth	80.61	70.30	66.62	69.23	70.75	69.95
Elderly	12.29	11.04	11.32	13.14	18.72	20.33
Total	92.91	81.34	77.94	82.37	89.47	90.29

Definitions for Selected Age Groups and Ratios:

- K-8: equals .5\*5, ages 6-13, and .5\*14.
- 9-12: equals .5\*14, ages 15-17, and .5\*18.
- K-12: equals .5\*5, ages 6 to 17, and .5\*18.
- College: equals .5\*18, 19, 20, 21, and .5\*22.
- Youth: 100 times ratio of <20 to 20-64
- Elderly: 100 times ratio of 65+ to 20-64
- Total: youth plus elderly ratios

### C.3. High-Growth Assumptions

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

FERTILITY

Sex ratio at birth: 105.0 males per 100 females

Distribution by age of fertility (percent)

Age	2003	2008	2013	2018	2023	2028
10-14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15-19	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
20-24	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%
25-29	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%
30-34	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%
35-39	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
40-44	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
45-49	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Age-specific fertility schedule (rates per 1,000 women)

Age	2003	2008	2013	2018	2023	2028
10-14	0.19	0.19	0.19	0.19	0.19	0.19
15-19	39.78	39.78	39.78	39.78	39.78	39.78
20-24	99.22	99.22	99.22	99.22	99.22	99.22
25-29	100.44	100.44	100.44	100.44	100.44	100.44
30-34	83.77	83.77	83.77	83.77	83.77	83.77
35-39	61.65	61.65	61.65	61.65	61.65	61.65
40-44	32.96	32.96	32.96	32.96	32.96	32.96
45-49	5.98	5.98	5.98	5.98	5.98	5.98
TFR	2.12	2.12	2.12	2.12	2.12	2.12
GRR	1.03	1.03	1.03	1.03	1.03	1.03
NRR	1.03	1.03	1.03	1.03	1.03	1.03
Mean Age	26.75	27.12	28.39	29.22	28.93	28.14

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Assumptions**

MORTALITY

Mortality Measure	2003	2008	2013	2018	2023	2028
e(0)						
Females	79.57	80.30	81.01	81.69	82.33	82.95
Males	73.86	75.06	76.20	77.29	78.33	79.32
Both	76.72	77.68	78.61	79.49	80.33	81.14
IMR (per 1,000)						
Females	4.69	4.16	3.69	3.29	2.94	2.63
Males	10.26	8.71	7.41	6.32	5.40	4.63
Both	7.54	6.49	5.60	4.84	4.20	3.65

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION PROJECTION NUMBERS

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	47	60	68	72	75	82
5 - 9	33	47	59	68	72	75
10 - 14	43	33	47	59	68	72
15 - 19	49	43	33	47	59	68
20 - 24	45	49	43	33	47	59
25 - 29	29	45	49	43	33	47
30 - 34	23	29	45	49	43	33
35 - 39	14	23	29	45	49	43
40 - 44	20	14	23	29	45	49
45 - 49	34	20	14	23	29	45
50 - 54	17	34	20	14	23	29
55 - 59	16	17	33	19	14	22
60 - 64	8	16	16	32	19	13
65 - 69	10	8	15	16	31	18
70 - 74	5	9	7	14	14	29
75 - 79	5	4	7	6	12	12
80 - 84	0	4	3	5	4	9
85+	6	3	3	3	4	4
<b>Total</b>	<b>404</b>	<b>455</b>	<b>514</b>	<b>576</b>	<b>640</b>	<b>709</b>
<b>Males</b>						
0 - 4	43	62	71	75	79	86
5 - 9	41	43	62	71	75	79
10 - 14	44	41	43	62	71	75
15 - 19	41	44	41	43	62	71
20 - 24	42	41	44	41	43	62
25 - 29	28	42	41	44	41	43
30 - 34	27	28	42	41	44	41
35 - 39	24	27	28	42	41	44
40 - 44	28	24	27	28	42	41
45 - 49	30	28	24	27	28	41
50 - 54	18	29	27	23	26	27
55 - 59	10	17	28	26	23	26
60 - 64	10	9	16	27	25	22
65 - 69	11	9	8	15	25	24
70 - 74	5	9	7	7	13	22
75 - 79	8	4	7	6	6	10
80 - 84	1	5	2	4	4	4
85+	1	1	2	2	3	3
<b>Total</b>	<b>412</b>	<b>463</b>	<b>521</b>	<b>583</b>	<b>648</b>	<b>719</b>
<b>Grand Total</b>	<b>816</b>	<b>917</b>	<b>1,034</b>	<b>1,159</b>	<b>1,287</b>	<b>1,427</b>

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL POPULATION CHANGE (average annual change in previous 5 years)

Component	2008	2013	2018	2023	2028
Population size	20	23	25	26	28
Yearly births	25	28	29	31	34
Yearly deaths	4	4	5	5	6
Natural Increase	20	23	25	26	28
Net yearly migrants	0	0	0	0	0
Rate of change (per 1,000):					
Birth rate	28.28	28.55	26.90	25.32	24.83
Death rate	4.86	4.60	4.24	4.24	4.22
Natural increase	23.42	23.95	22.66	21.08	20.61
Net Migration	0.00	0.00	0.00	0.00	0.00
Population increase	23.42	23.95	22.66	21.08	20.61

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

ANNUAL CHANGE BY AGE GROUP (average annual percent in previous 5 years)

Age	2008	2013	2018	2023	2028
<b>Females</b>					
0 - 4	4.7%	2.6%	1.1%	1.0%	1.7%
5 - 9	7.1%	4.7%	2.6%	1.2%	1.0%
10 - 14	-5.3%	7.1%	4.7%	2.6%	1.2%
15 - 19	-2.6%	-5.3%	7.1%	4.7%	2.6%
20 - 24	1.7%	-2.6%	-5.3%	7.1%	4.7%
25 - 29	8.8%	1.7%	-2.6%	-5.3%	7.1%
30 - 34	4.6%	8.8%	1.7%	-2.6%	-5.3%
35 - 39	9.9%	4.6%	8.8%	1.7%	-2.6%
40 - 44	-7.2%	9.9%	4.6%	8.8%	1.7%
45 - 49	-10.7%	-7.2%	9.9%	4.6%	8.8%
50 - 54	13.7%	-10.7%	-7.2%	9.9%	4.6%
55 - 59	0.9%	13.7%	-10.7%	-7.1%	10.0%
60 - 64	13.3%	0.9%	13.8%	-10.6%	-7.1%
65 - 69	-5.6%	13.4%	1.0%	13.8%	-10.5%
70 - 74	11.7%	-5.4%	13.6%	1.2%	14.0%
75 - 79	-4.0%	12.0%	-5.1%	13.8%	1.5%
80 - 84	0.0%	-3.6%	12.4%	-4.7%	14.2%
85+	-15.7%	1.1%	-1.1%	7.2%	0.4%
Total	2.4%	2.4%	2.3%	2.1%	2.1%
<b>Males</b>					
0 - 4	7.4%	2.6%	1.2%	1.0%	1.7%
5 - 9	0.9%	7.4%	2.6%	1.2%	1.0%
10 - 14	-1.4%	0.9%	7.4%	2.6%	1.2%
15 - 19	1.4%	-1.4%	0.9%	7.4%	2.6%
20 - 24	-0.5%	1.4%	-1.4%	0.9%	7.4%
25 - 29	8.1%	-0.5%	1.4%	-1.4%	0.9%
30 - 34	0.7%	8.1%	-0.5%	1.4%	-1.4%
35 - 39	2.3%	0.7%	8.1%	-0.5%	1.4%
40 - 44	-3.2%	2.3%	0.7%	8.1%	-0.5%
45 - 49	-1.6%	-3.2%	2.3%	0.7%	8.1%
50 - 54	9.8%	-1.5%	-3.1%	2.4%	0.8%
55 - 59	11.0%	9.9%	-1.4%	-3.0%	2.4%
60 - 64	-1.4%	11.2%	10.1%	-1.3%	-2.9%
65 - 69	-4.3%	-1.1%	11.4%	10.3%	-1.1%
70 - 74	11.8%	-3.9%	-0.7%	11.8%	10.6%
75 - 79	-15.7%	12.4%	-3.4%	-0.2%	12.2%
80 - 84	31.9%	-15.1%	12.9%	-2.8%	0.3%
85+	-4.2%	21.4%	-3.7%	6.6%	1.0%
Total	2.3%	2.4%	2.3%	2.1%	2.1%
Grand Total	2.3%	2.4%	2.3%	2.1%	2.1%

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

PROPORTIONS OF TOTAL POPULATION BY SEX

Age	2003	2008	2013	2018	2023	2028
<b>Females</b>						
0 - 4	11.6%	13.1%	13.2%	12.4%	11.8%	11.6%
5 - 9	8.2%	10.3%	11.6%	11.7%	11.2%	10.6%
10 - 14	10.6%	7.3%	9.1%	10.3%	10.6%	10.1%
15 - 19	12.1%	9.4%	6.4%	8.2%	9.3%	9.5%
20 - 24	11.1%	10.8%	8.4%	5.7%	7.3%	8.4%
25 - 29	7.2%	9.9%	9.5%	7.5%	5.2%	6.6%
30 - 34	5.7%	6.4%	8.7%	8.5%	6.7%	4.6%
35 - 39	3.5%	5.0%	5.6%	7.8%	7.6%	6.0%
40 - 44	5.0%	3.1%	4.5%	5.0%	7.0%	6.9%
45 - 49	8.4%	4.4%	2.7%	4.0%	4.5%	6.3%
50 - 54	4.2%	7.4%	3.8%	2.4%	3.5%	4.0%
55 - 59	4.0%	3.7%	6.5%	3.4%	2.1%	3.2%
60 - 64	2.0%	3.4%	3.2%	5.6%	3.0%	1.9%
65 - 69	2.5%	1.7%	2.9%	2.7%	4.9%	2.6%
70 - 74	1.2%	2.0%	1.3%	2.3%	2.2%	4.1%
75 - 79	1.2%	0.9%	1.5%	1.0%	1.8%	1.8%
80 - 84	0.0%	0.8%	0.6%	0.9%	0.7%	1.2%
85+	1.5%	0.6%	0.6%	0.5%	0.6%	0.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Males</b>						
0 - 4	10.4%	13.4%	13.6%	12.9%	12.2%	11.9%
5 - 9	10.0%	9.3%	11.9%	12.1%	11.6%	11.0%
10 - 14	10.7%	8.9%	8.2%	10.6%	10.9%	10.4%
15 - 19	10.0%	9.5%	7.9%	7.4%	9.6%	9.8%
20 - 24	10.2%	8.8%	8.4%	7.0%	6.6%	8.6%
25 - 29	6.8%	9.1%	7.8%	7.5%	6.3%	5.9%
30 - 34	6.6%	6.0%	8.0%	7.0%	6.7%	5.7%
35 - 39	5.8%	5.8%	5.3%	7.2%	6.3%	6.1%
40 - 44	6.8%	5.2%	5.1%	4.8%	6.4%	5.6%
45 - 49	7.3%	6.0%	4.5%	4.6%	4.3%	5.8%
50 - 54	4.4%	6.4%	5.2%	4.0%	4.1%	3.8%
55 - 59	2.4%	3.7%	5.5%	4.5%	3.5%	3.6%
60 - 64	2.4%	2.0%	3.1%	4.6%	3.9%	3.0%
65 - 69	2.7%	1.9%	1.6%	2.6%	3.8%	3.3%
70 - 74	1.2%	2.0%	1.4%	1.2%	2.0%	3.1%
75 - 79	1.9%	0.8%	1.3%	1.0%	0.9%	1.4%
80 - 84	0.2%	1.1%	0.4%	0.8%	0.6%	0.5%
85+	0.2%	0.2%	0.5%	0.3%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**C.3. High Growth Assumptions**  
**Population Projection of Coquille Indian Tribe, December 31, 2003 to December 31, 2028**  
**Projection Results**

POPULATION FOR SELECTED AGE GROUPS

Age	2003	2008	2013	2018	2023	2028
<b>Numbers</b>						
0-14	251	285	350	406	439	468
15-24	177	177	161	164	211	259
25-44	193	231	283	320	336	339
45-64	143	170	179	192	186	225
65+	52	54	62	77	115	135
75+	21	20	25	26	32	42
85+	7	4	5	5	7	7
<b>School-Age</b>						
K-8	145	147	190	234	256	270
9-12	72	68	61	75	99	111
K-12	217	216	251	309	355	382
College	71	82	79	81	99	114
<b>Percentages</b>						
0-14	30.8%	31.1%	33.8%	35.1%	34.1%	32.8%
15-24	21.7%	19.3%	15.5%	14.1%	16.4%	18.2%
25-44	23.7%	25.2%	27.4%	27.6%	26.1%	23.8%
45-64	17.5%	18.5%	17.3%	16.6%	14.4%	15.8%
65+	6.4%	5.9%	6.0%	6.7%	9.0%	9.5%
75+	2.6%	2.1%	2.4%	2.3%	2.5%	3.0%
85+	0.9%	0.4%	0.5%	0.4%	0.5%	0.5%
<b>School-Age</b>						
K-8	17.8%	16.1%	18.4%	20.2%	19.9%	18.9%
9-12	8.8%	7.4%	5.9%	6.5%	7.7%	7.8%
K-12	26.5%	23.5%	24.3%	26.7%	27.6%	26.8%
College	8.7%	8.9%	7.6%	7.0%	7.7%	8.0%
<b>Dependency ratios (per 100):</b>						
Youth	80.61	75.86	77.25	84.81	91.57	88.46
Elderly	12.29	11.04	11.34	13.19	18.84	19.73
Total	92.91	86.90	88.59	98.00	110.41	108.19

Definitions for Selected Age Groups and Ratios:

- K-8: equals .5\*5, ages 6-13, and .5\*14.
- '9-12: equals .5\*14, ages 15-17, and .5\*18.
- K-12: equals .5\*5, ages 6 to 17, and .5\*18.
- College: equals .5\*18, 19, 20, 21, and .5\*22.
- Youth: 100 times ratio of <20 to 20-64
- Elderly: 100 times ratio of 65+ to 20-64
- Total: youth plus elderly ratios