

Status of Subsistence Uses in EVOS-Area Communities, 2014

Division of Subsistence

Alaska Department of Fish and Game

Funded by EVOS Trustee Council, Project 15150122

Prince William Sound Regional Citizens' Advisory Council,
Science Night

November 30, 2017

The Division of Subsistence, ADF&G



- Statutory responsibilities
- Applied social science methods: surveys, interviews, mapping, participant observation
- Local partnerships
- Technical papers and databases
- History of research in EVOS area

EVOS Trustee Council Recovery Objective for Subsistence

“Subsistence will have recovered when injured resources used for subsistence are healthy and productive and exist at pre-spill levels. In addition, there is recognition that people must be confident that the resources are safe to eat and that the cultural values provided by gathering, preparing, and sharing food need to be reintegrated into community life.”

Research Questions

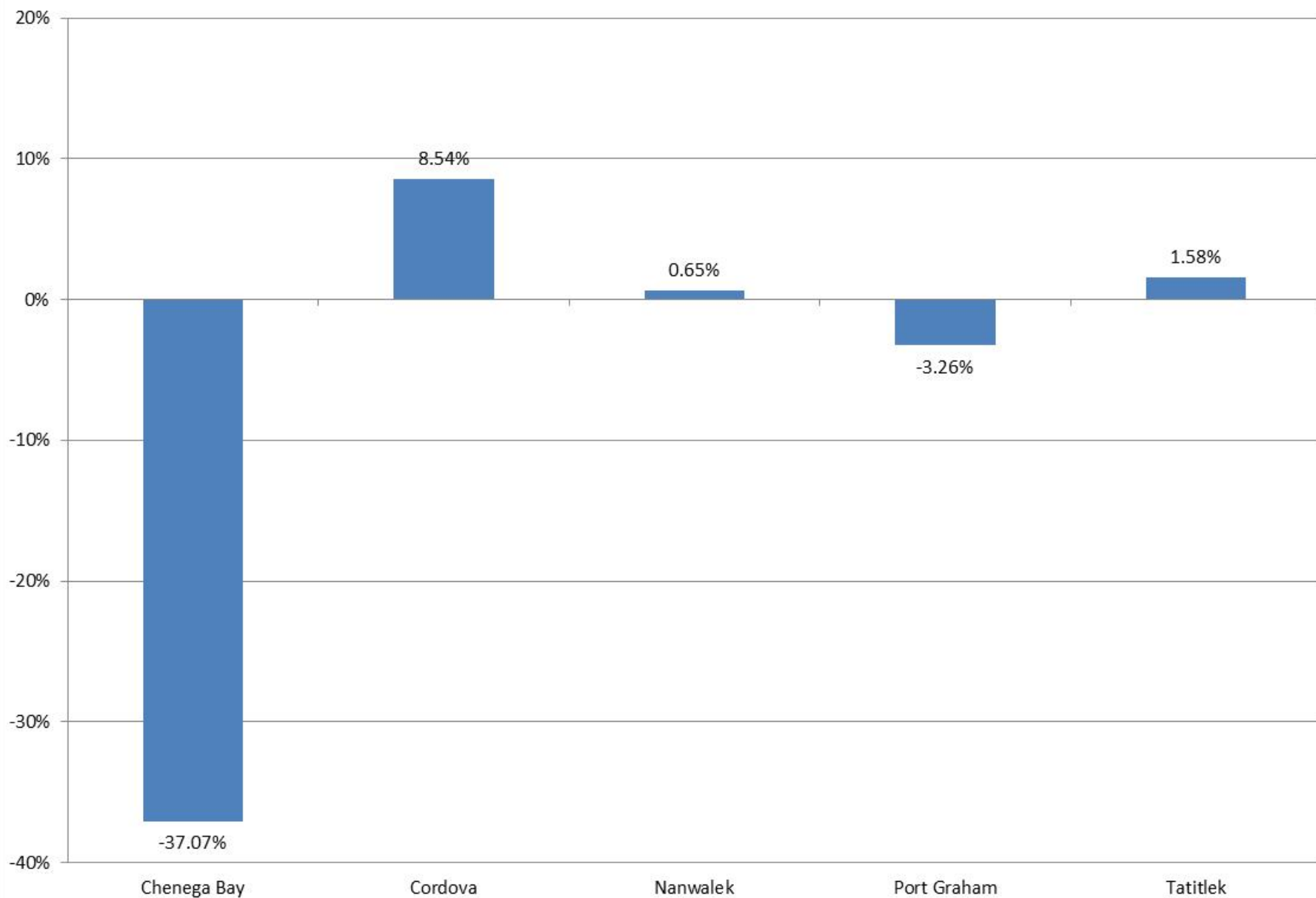
1. Are resources used for subsistence purposes healthy, and are their populations at pre-spill levels?
2. Are people confident that resources are safe to eat?
3. Have the cultural values associated with subsistence uses been reintegrated into community life?

Additional: update harvest and use information, plus demographic and economic data

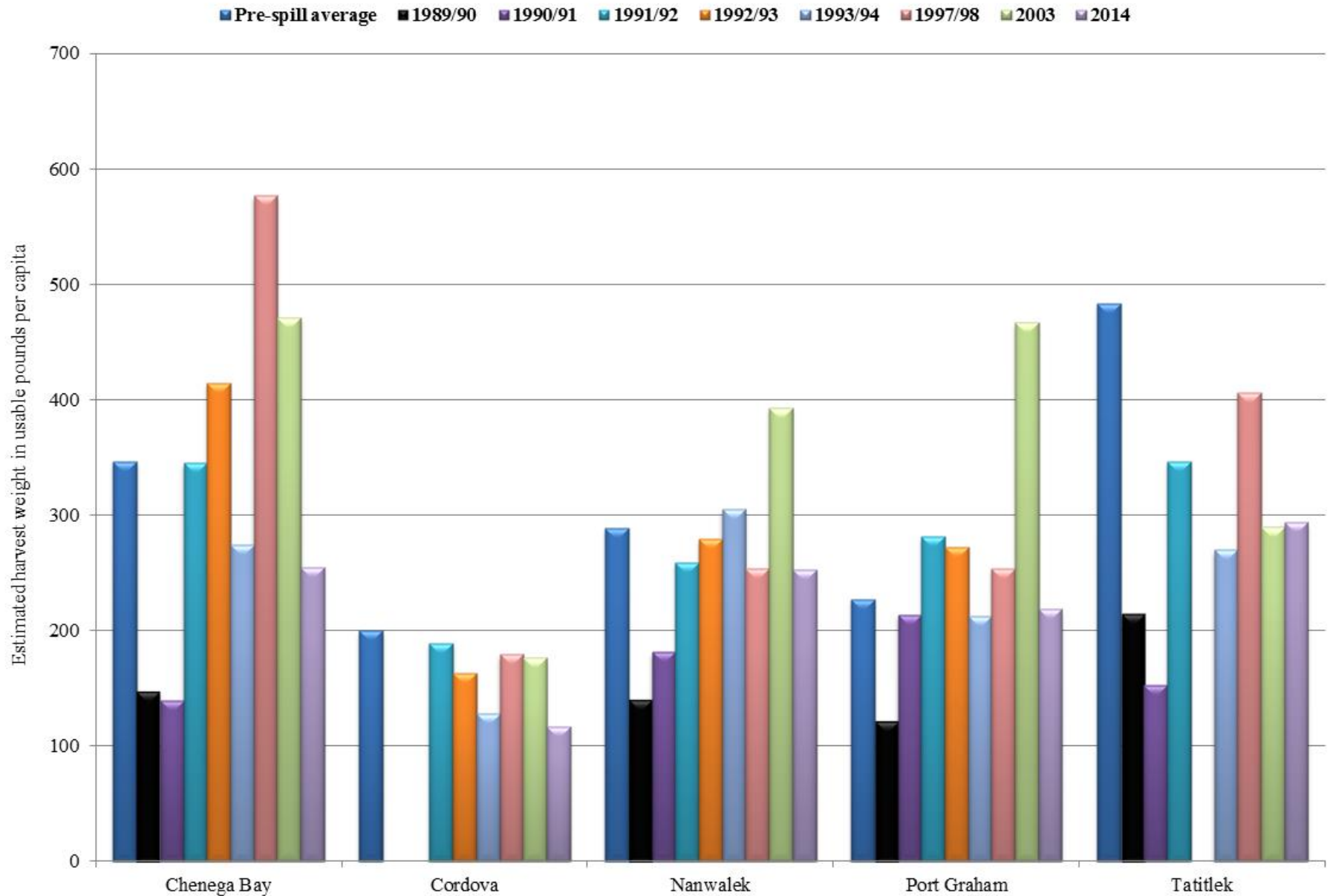
Study communities & methods

- Funded by EVOS: Chenega Bay, Cordova, and Tatitlek
- Funded by LNG Project: Nanwalek and Port Graham
- Method: systematic household survey
- Census samples except random sample in Cordova (184 HHs = 19.4%)
- Community approvals and review meetings
- Final report: Technical Paper No. 412 (June 2016)

Change in population, 2003 to 2014, based on ADF&G household survey

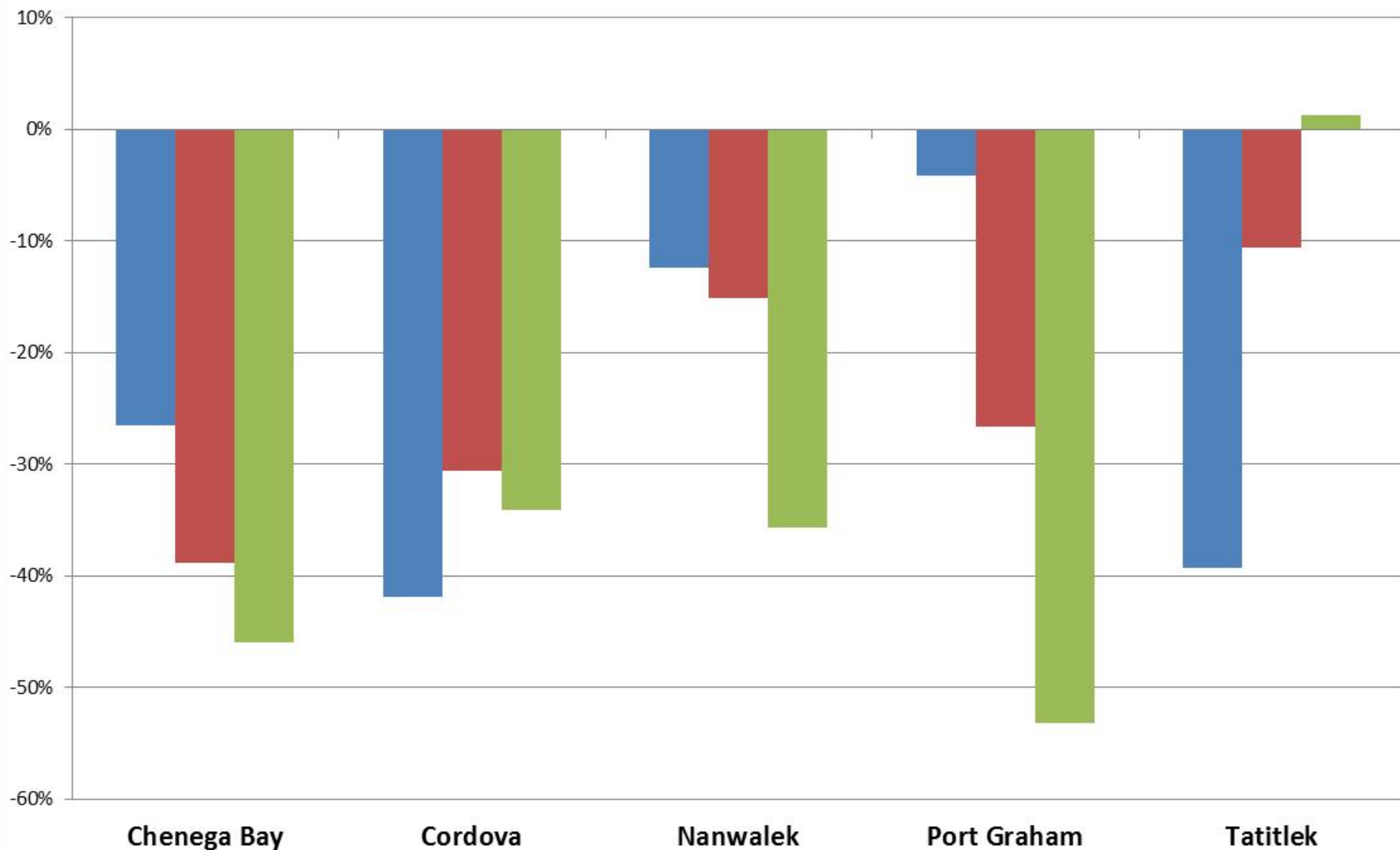


Estimated Harvests, Pounds Usable Weight per Person



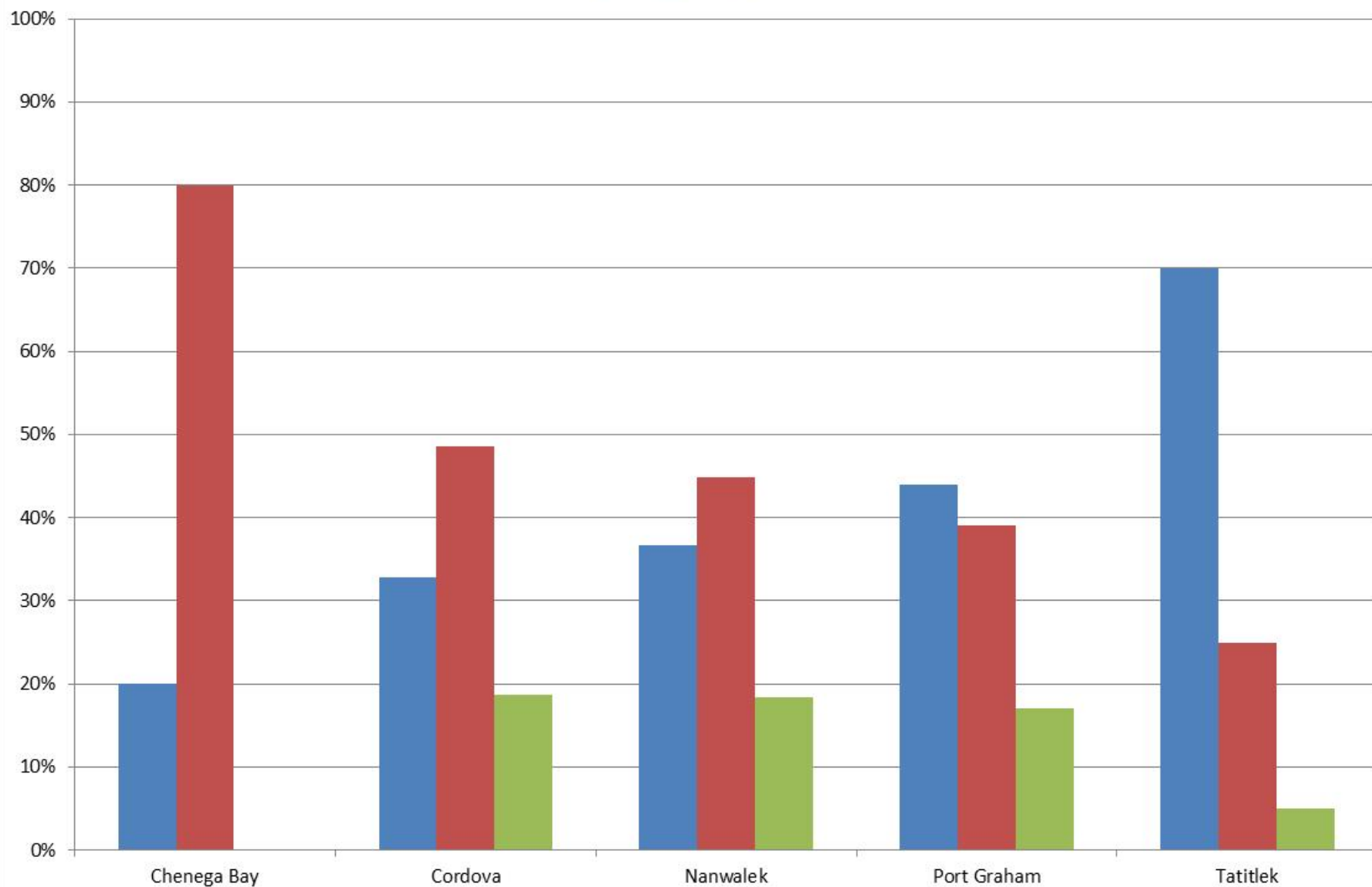
Comparison of 2014 Estimated Harvests with Previous Harvest Estimates

■ Difference, 2014 from pre-spill average ■ Difference, 2014 from post-spill average ■ Difference, 2014 from 2003



Household's' Assesments of Total Subsistence Uses in 2014

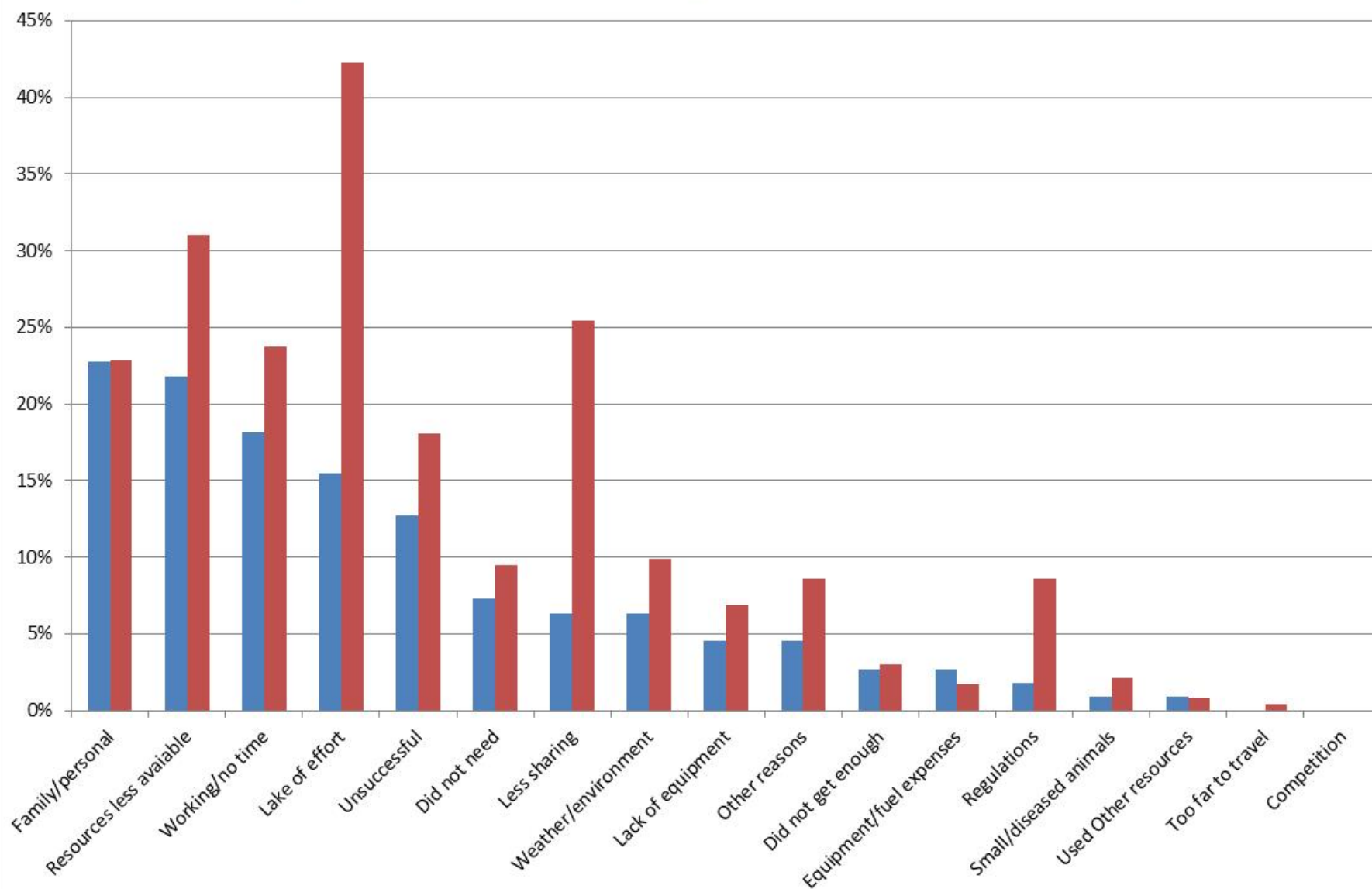
■ Less ■ Same ■ More



Reasons for Using Less Resources in 2014

Reason for using less resources overall

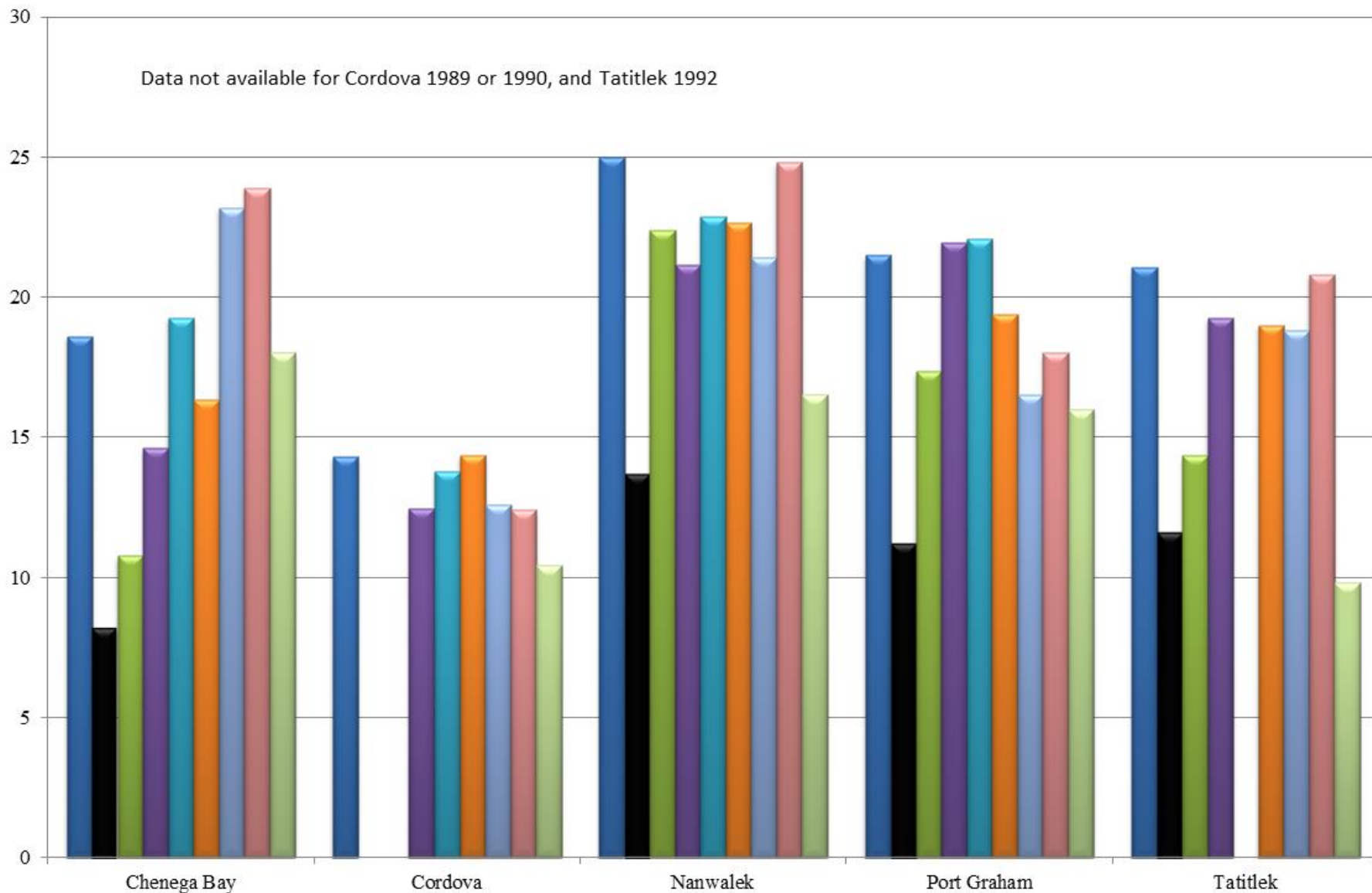
Reason for using less for any resource category



Average Number of Resources Used per Household

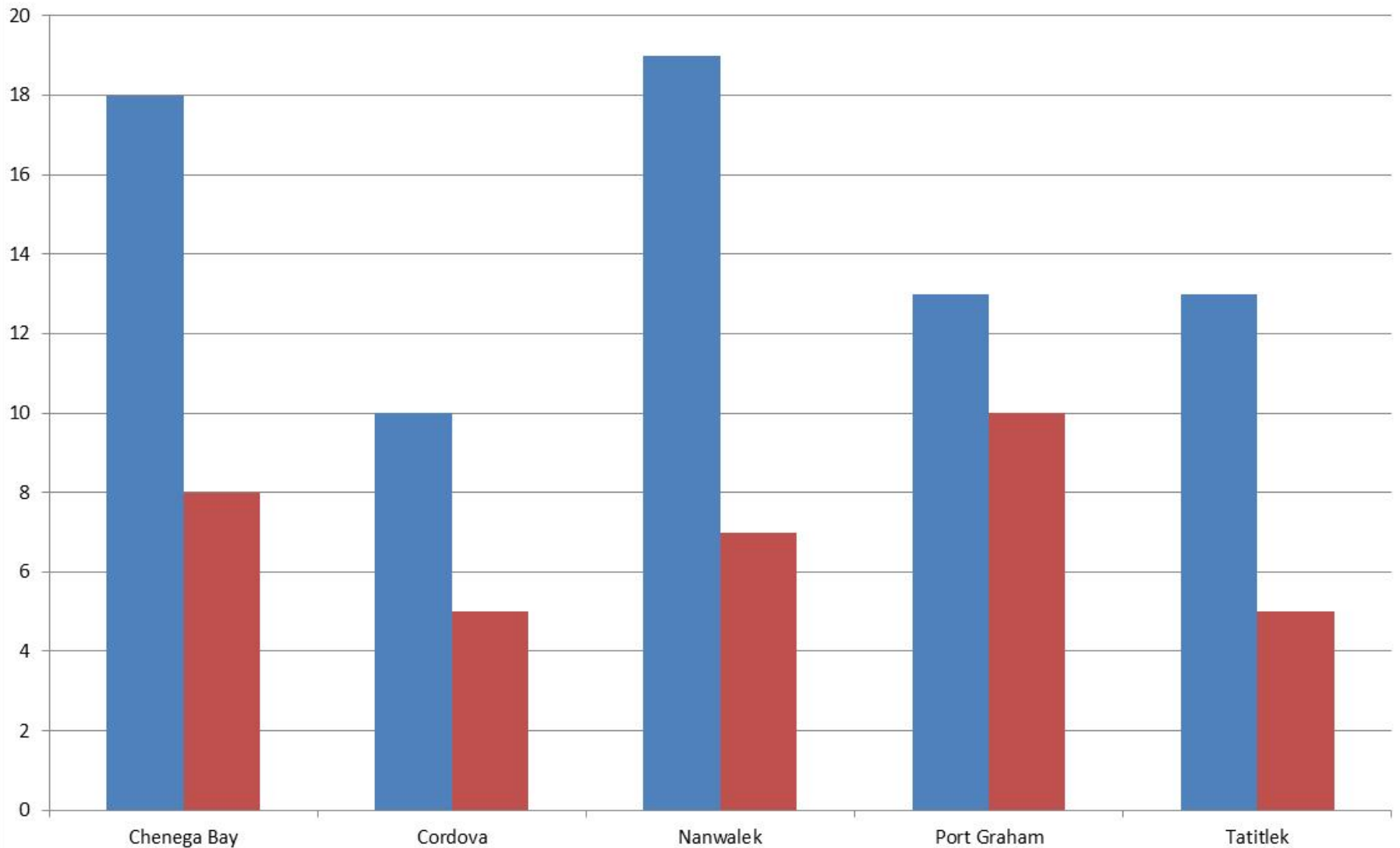
■ Pre-spill average ■ 1989 ■ 1990 ■ 1991 ■ 1992 ■ 1993 ■ 1998 ■ 2003 ■ 2014

Data not available for Cordova 1989 or 1990, and Tatitlek 1992



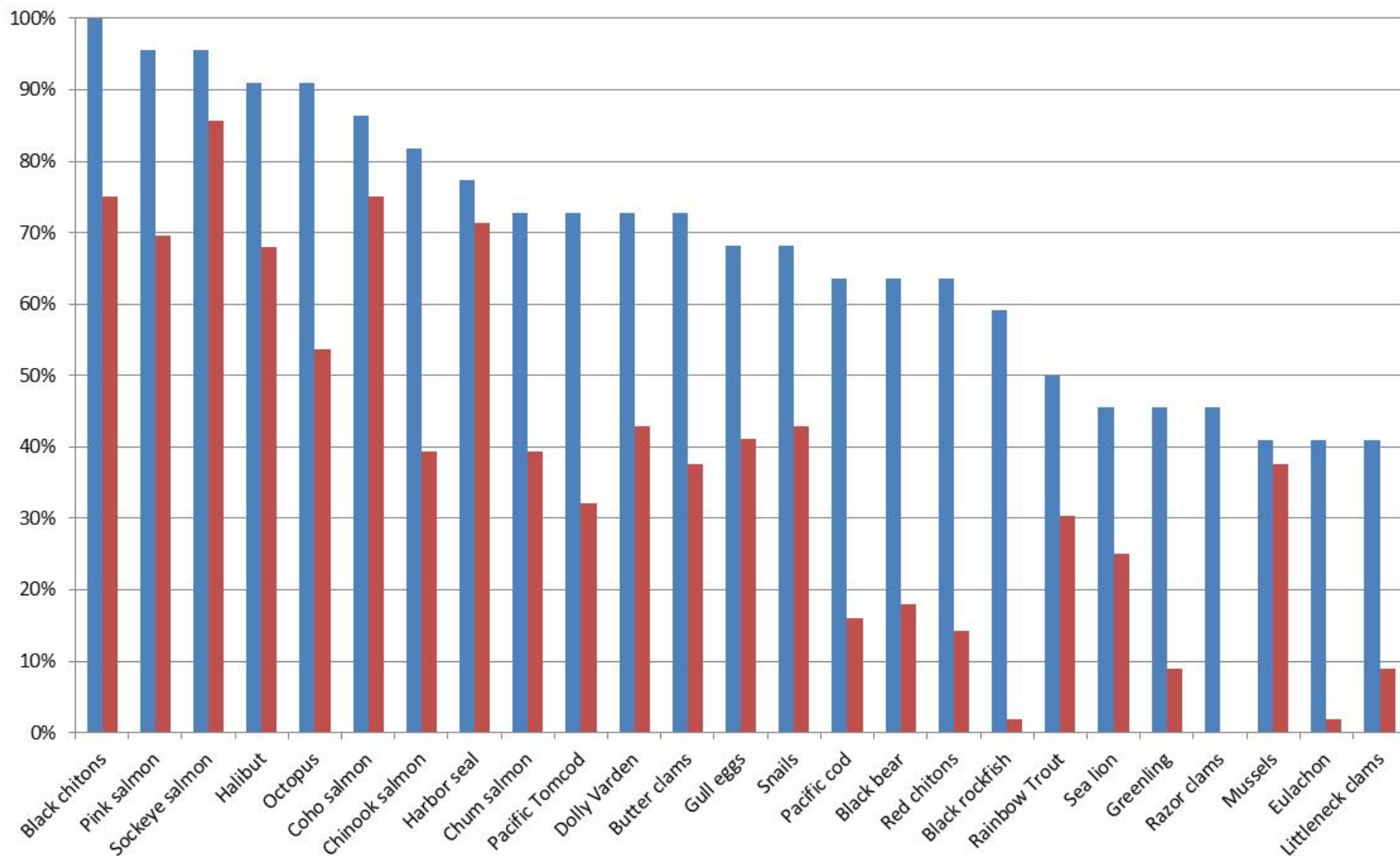
Number of Resources Used by 50% or More of Households, 2003 and 2014

■ 2003 ■ 2014



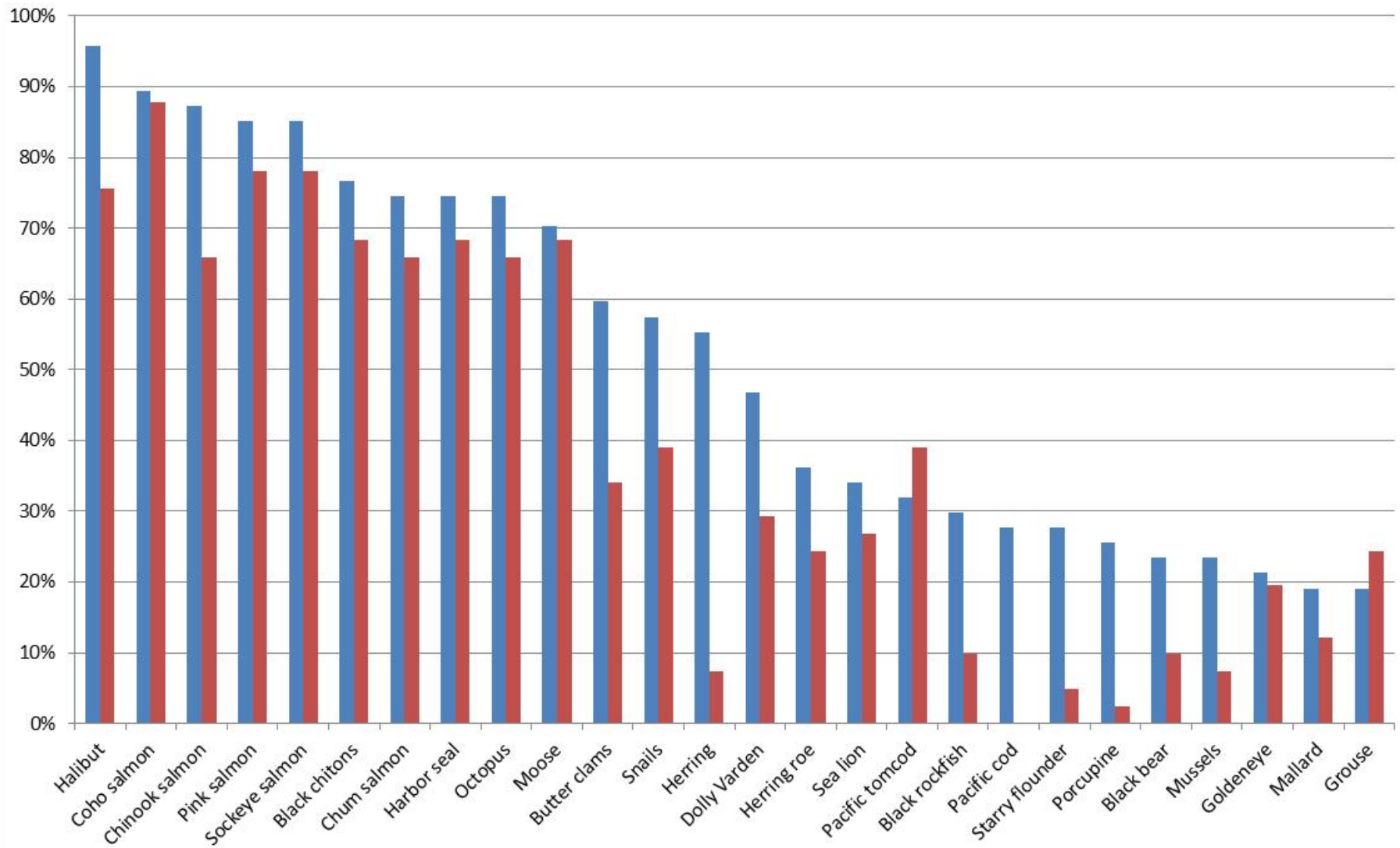
Nanwalek: 25 resources used by the most households in 2003, percentage using in 2003 compared to 2014

■ 2003 ■ 2014

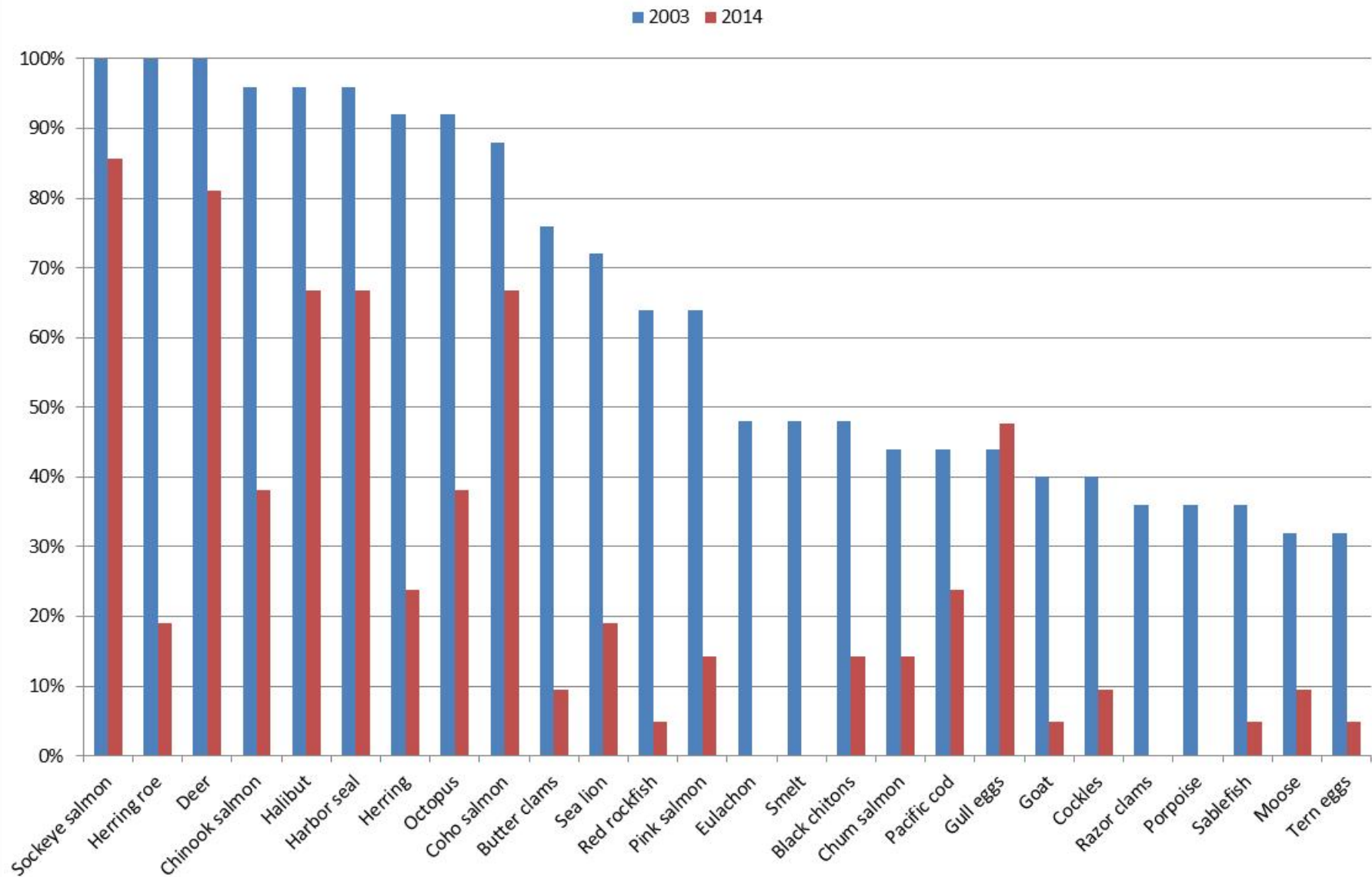


Port Graham: 25 resources used by the most households in 2003, percentage using in 2003 compared to 2014

■ 2003 ■ 2014

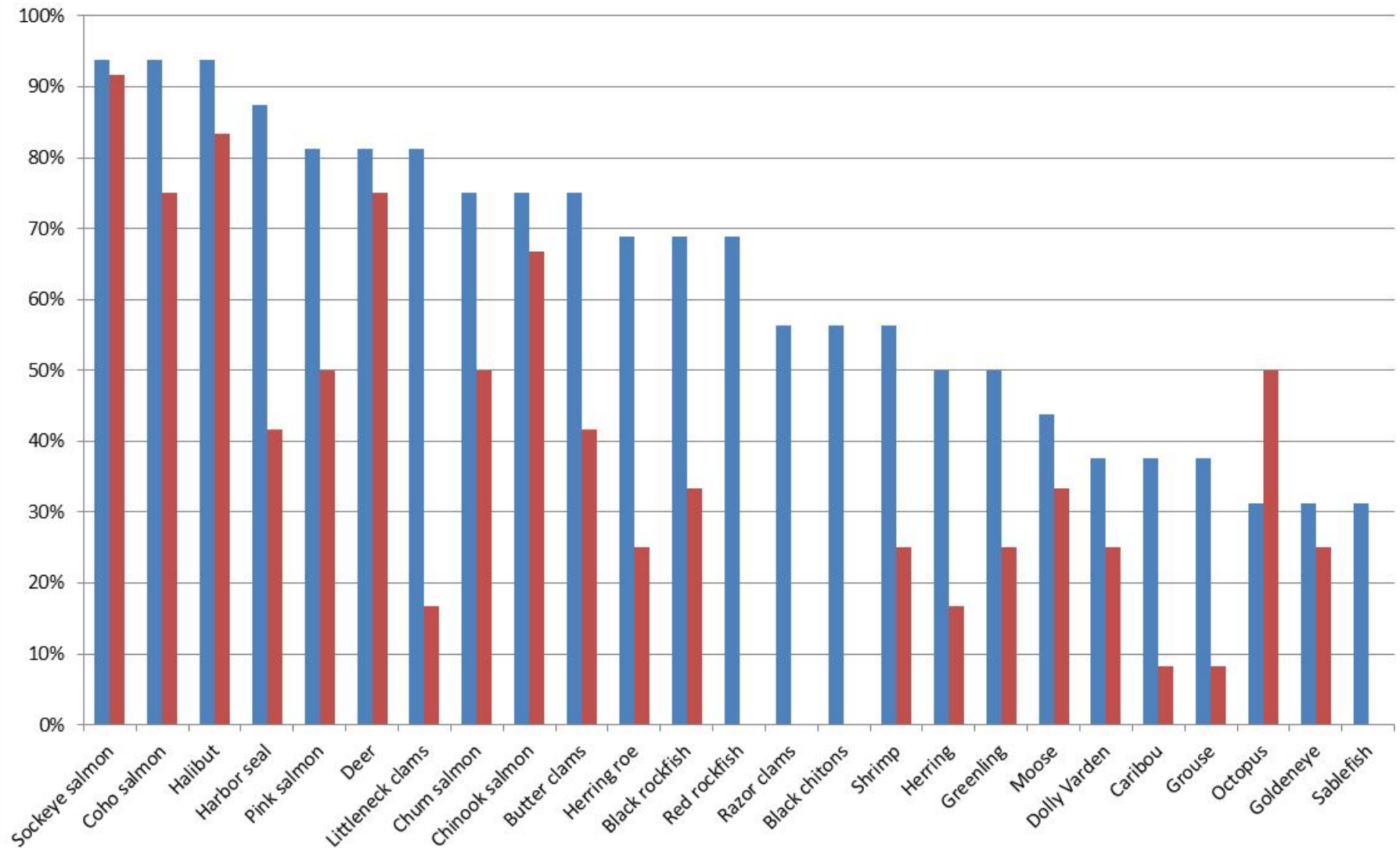


Tatitlek: 25 resources used by the most households in 2003, percentage using in 2003 compared to 2014



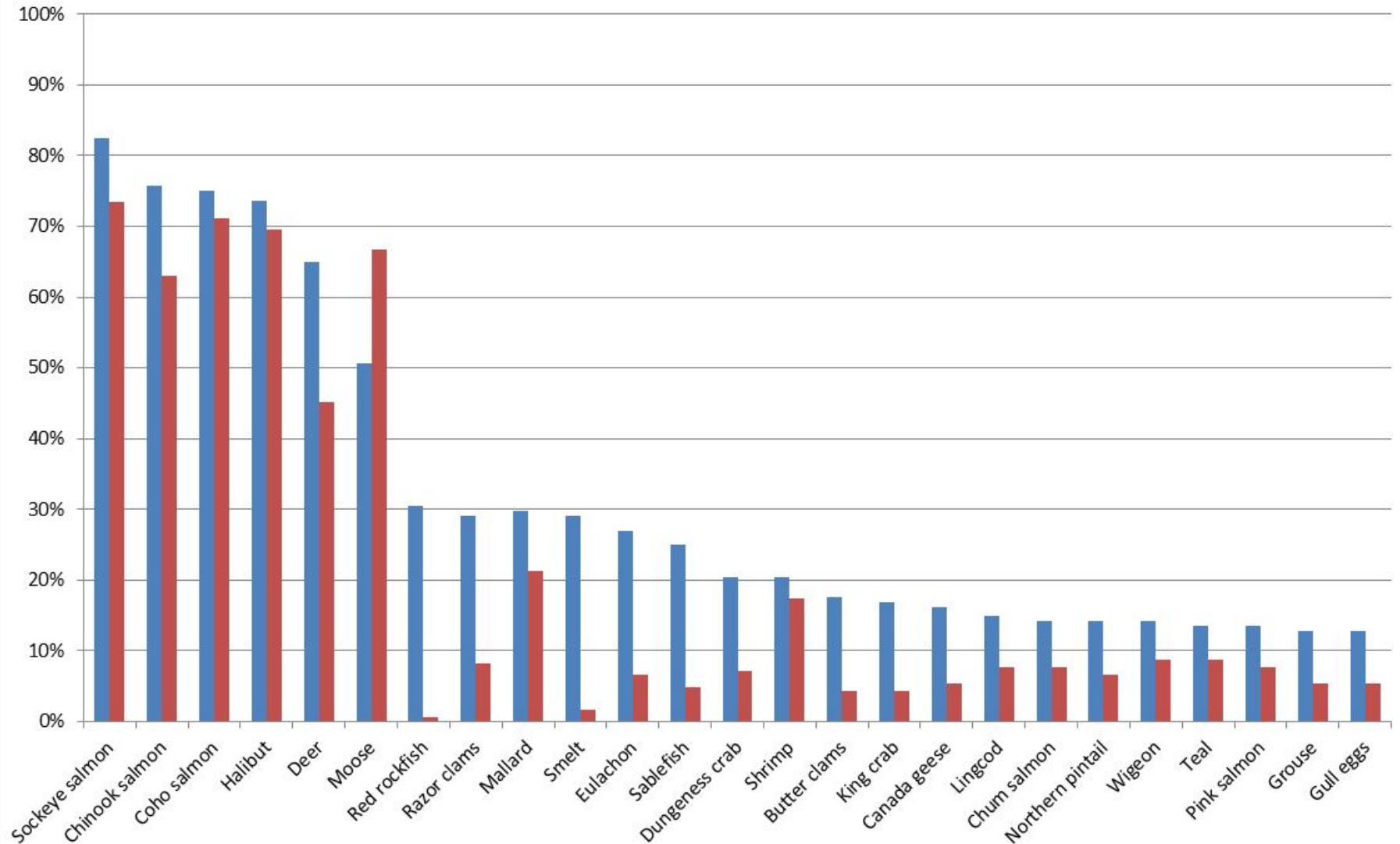
Chenega Bay: 25 resources used by the most households in 2003, percentage using in 2003 compared to 2014

■ 2003 ■ 2014



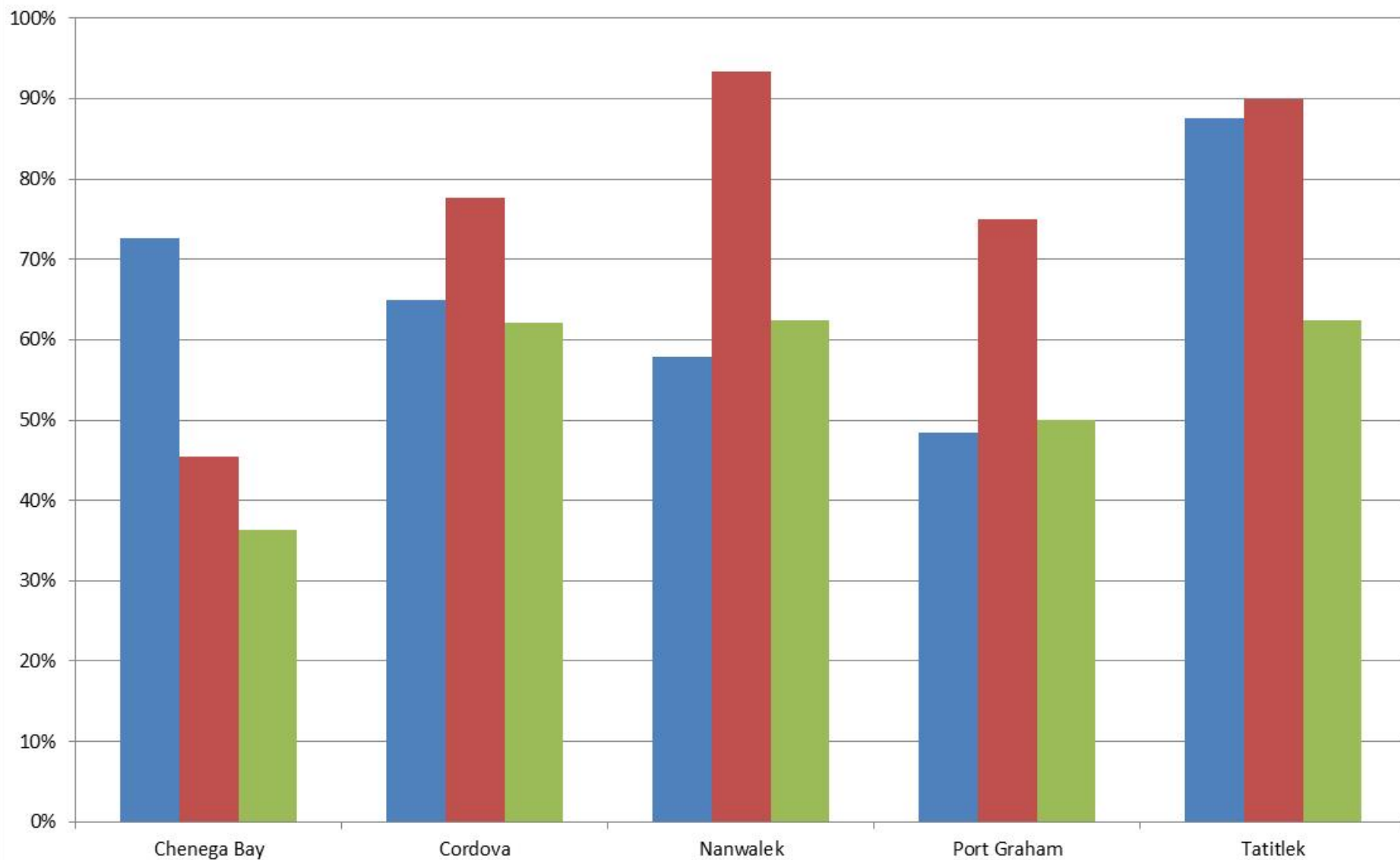
Cordova: 25 resources used by the most households in 2003, percentage using in 2003 compared to 2014

■ 2003 ■ 2014



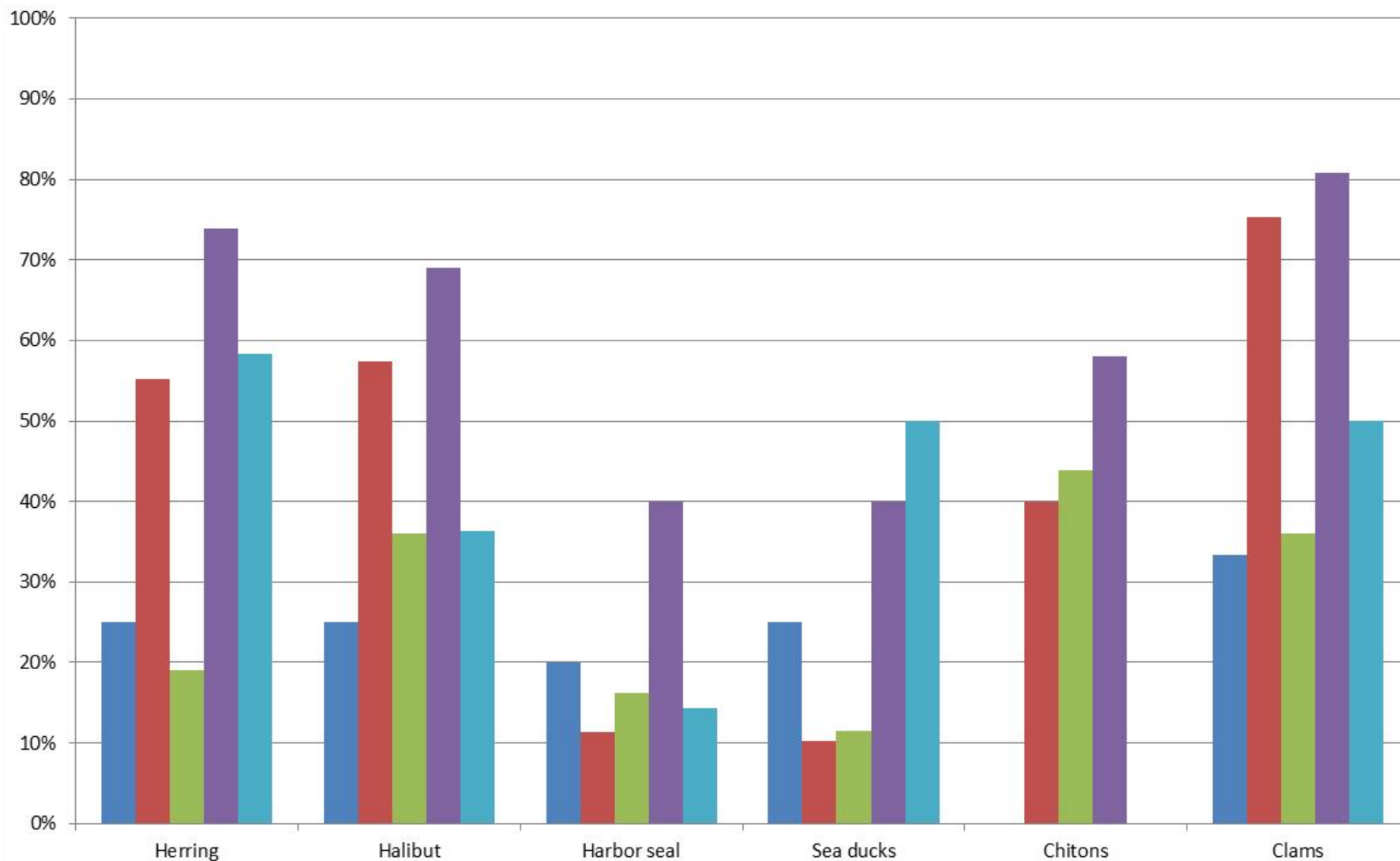
Have Resources Recovered since the Exxon Valdez Oil Spill? Percentage Saying "No"

■ 1998 ■ 2003 ■ 2014



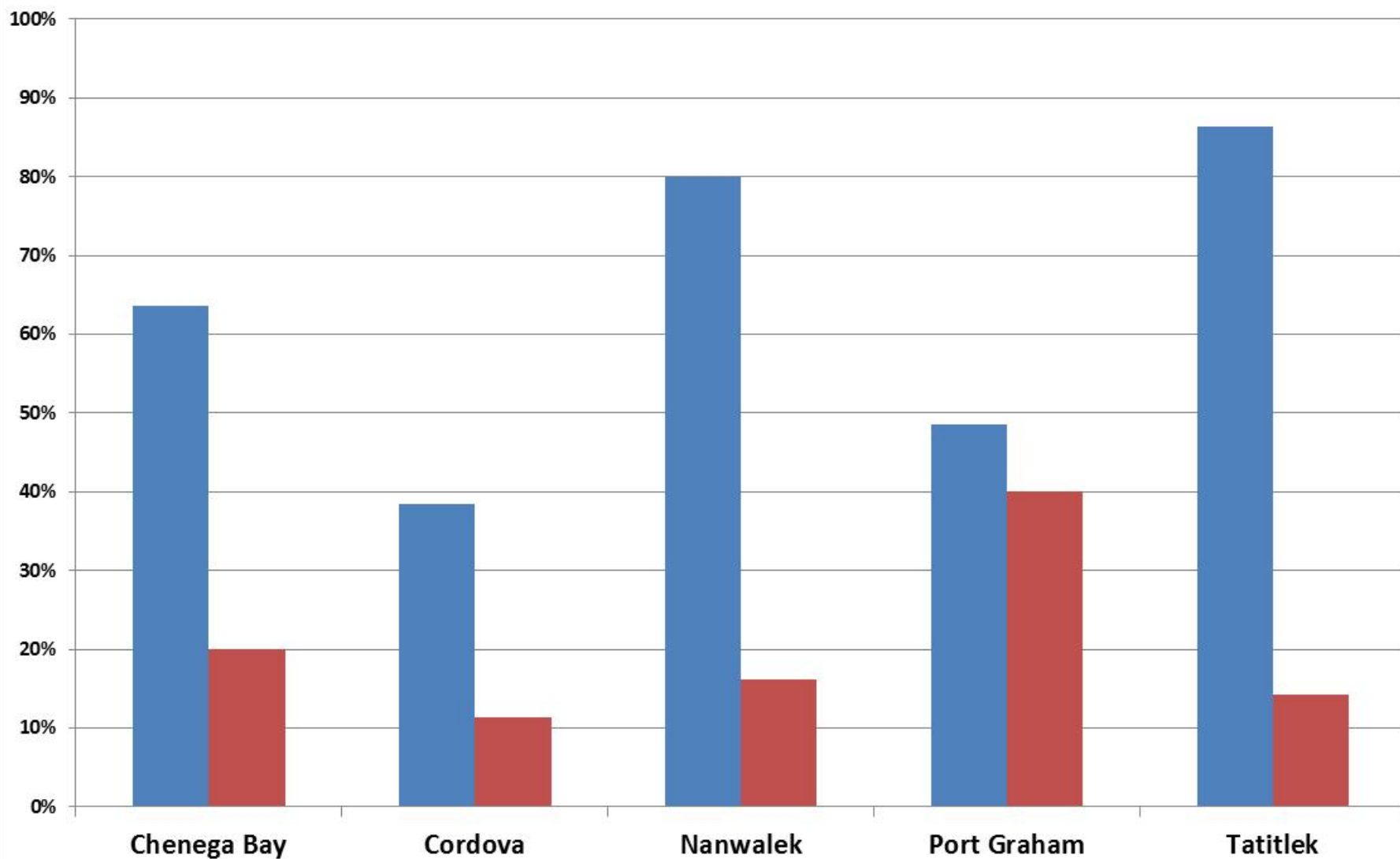
Assessments of Resource Availability to Harvest: Percentage of Respondents Reporting "Less"

Chenega Bay Cordova Nanwalek Port Graham Tatitlek



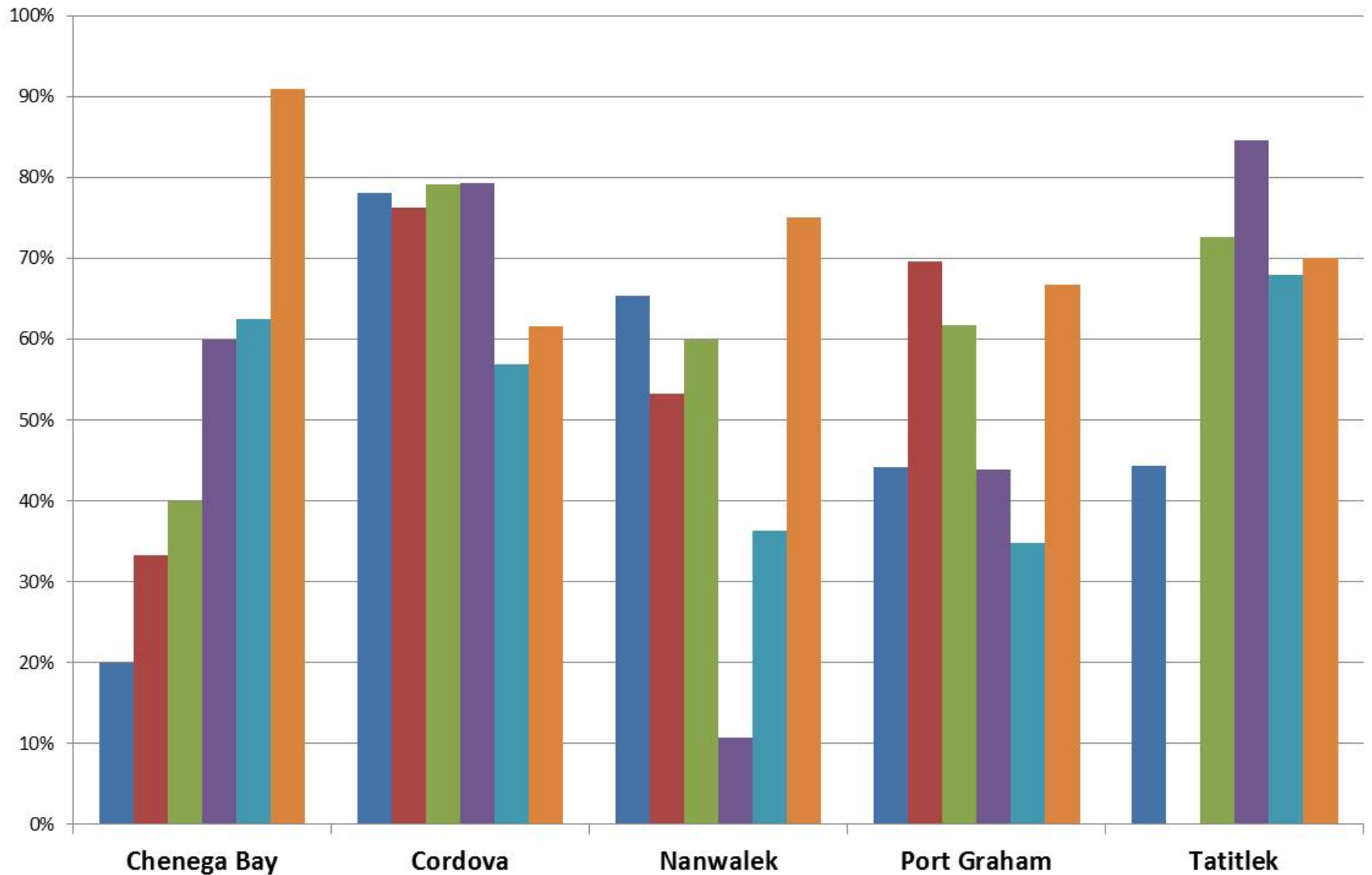
Availability of Harbor Seals to Harvest: Percentage of Respondents Saying "Less," 2003 and 2014

■ 2003 ■ 2014



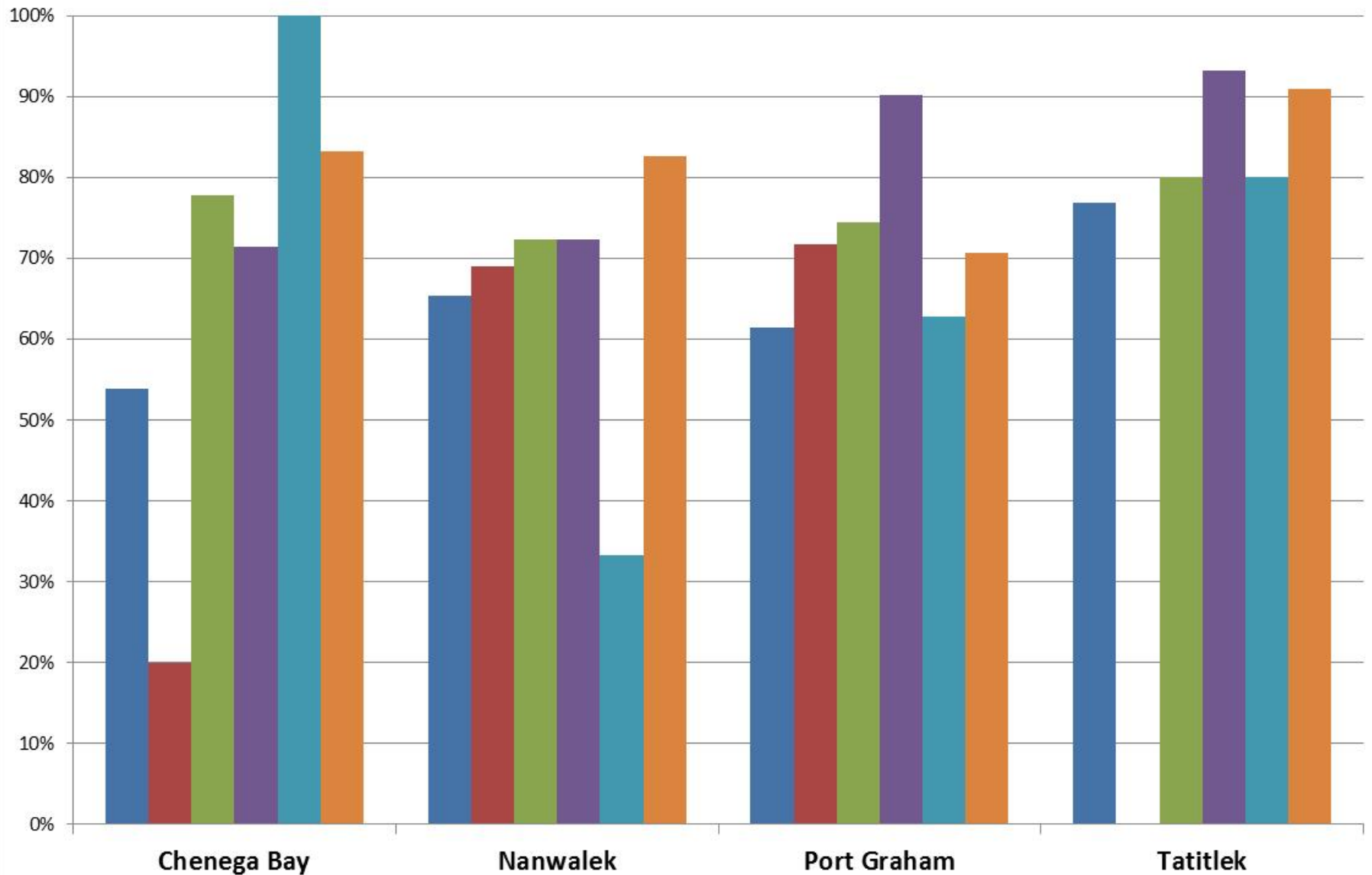
Are Clams Safe to Eat? Percentage of Respondents Saying "Yes"

■ 1991 ■ 1992 ■ 1993 ■ 1998 ■ 2003 ■ 2014



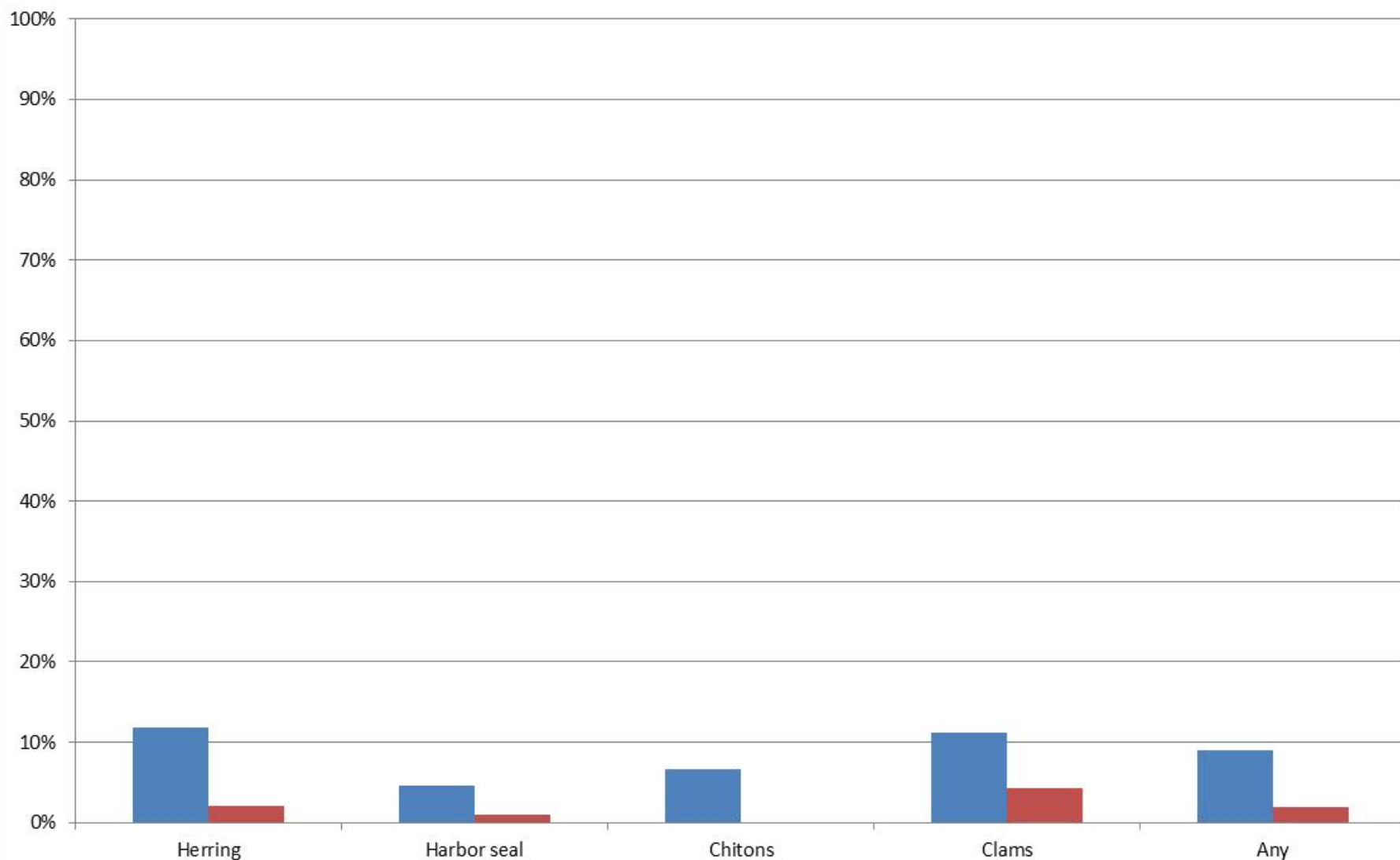
Are Seals Safe to Eat? Percentage of Respondents Saying "Yes"

■ 1991 ■ 1992 ■ 1993 ■ 1998 ■ 2003 ■ 2014



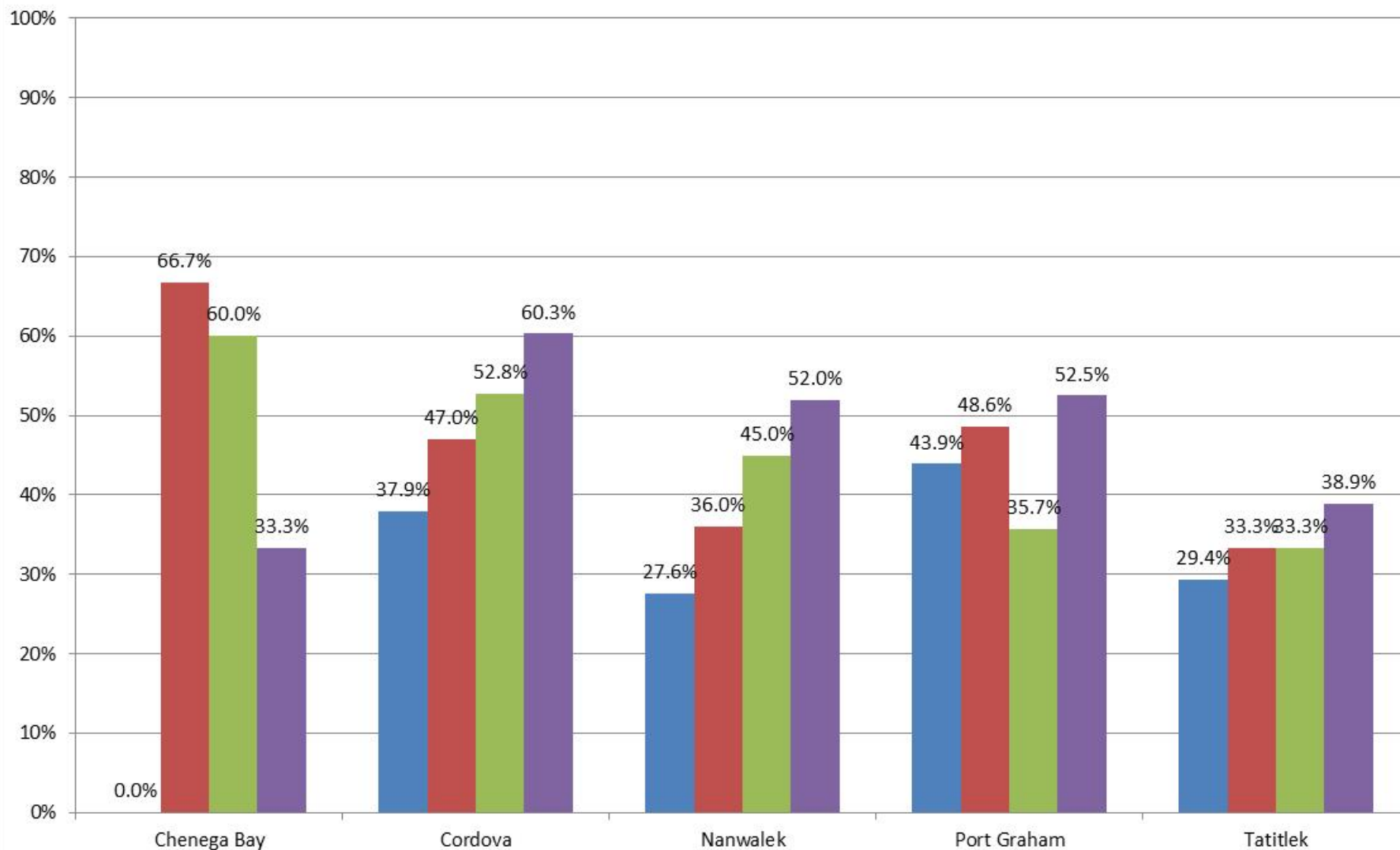
Percentage of Respondents Saying Resource not Safe, Percentage Saying Not Safe due to EVOS Contamination

■ Not safe ■ Not safe due to EVOS contamination



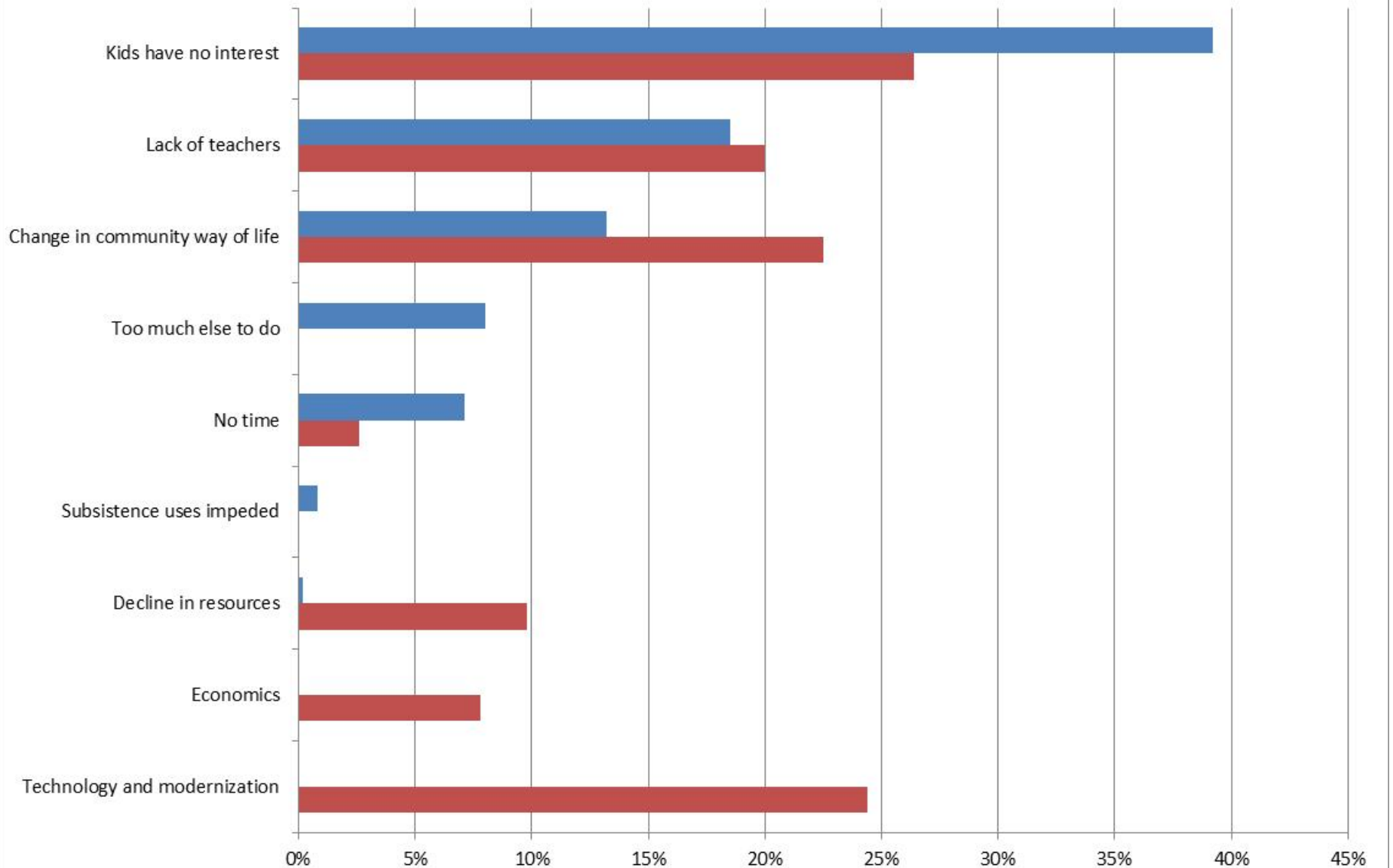
Are Young Adults Learning Enough Subsistence Skills? Percentage Saying "Yes"

■ 1991 ■ 1998 ■ 2003 ■ 2014



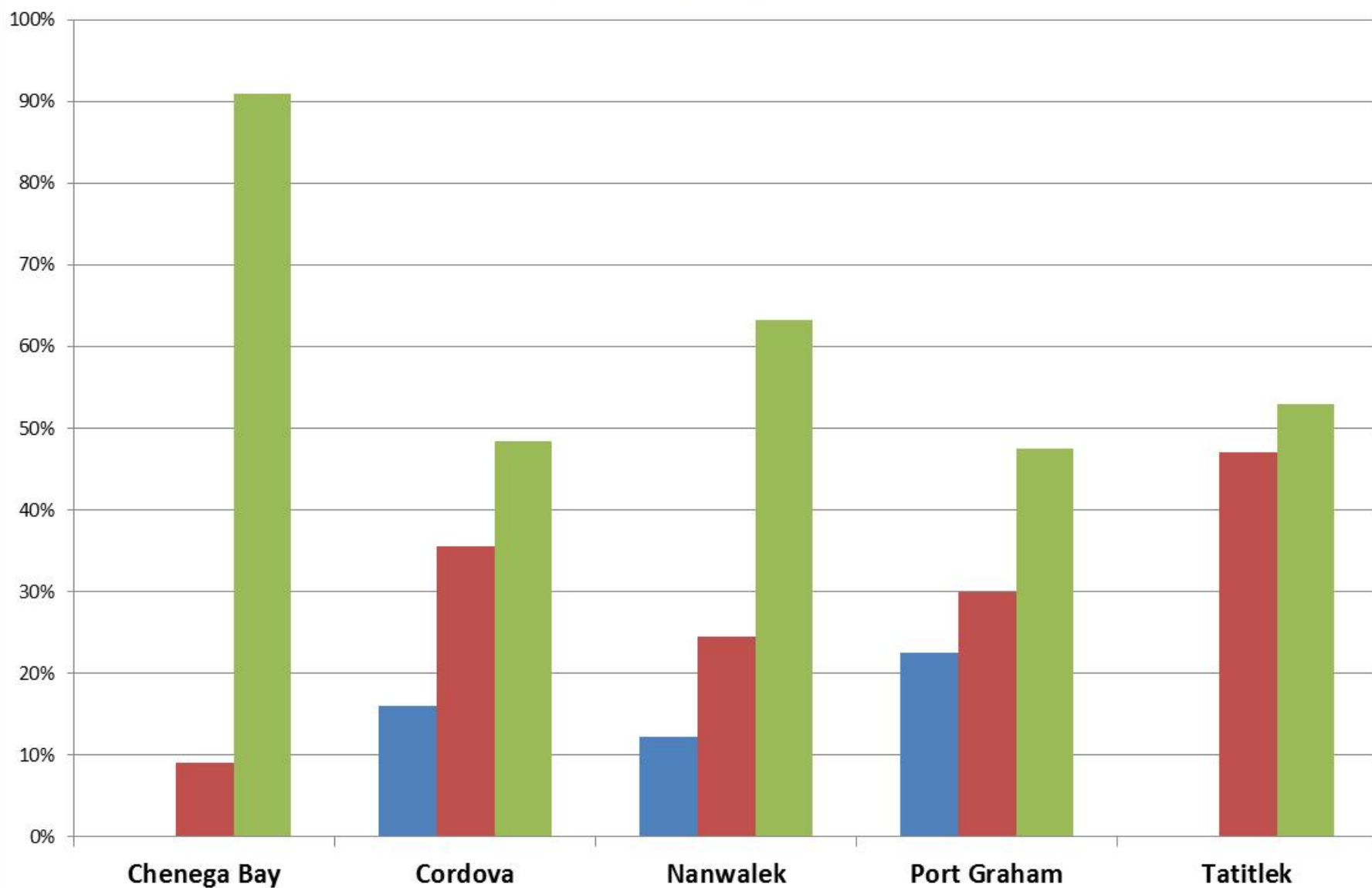
Reasons Why Young Adults are Not Learning Enough Subsistence Skills

■ 2003 ■ 2014



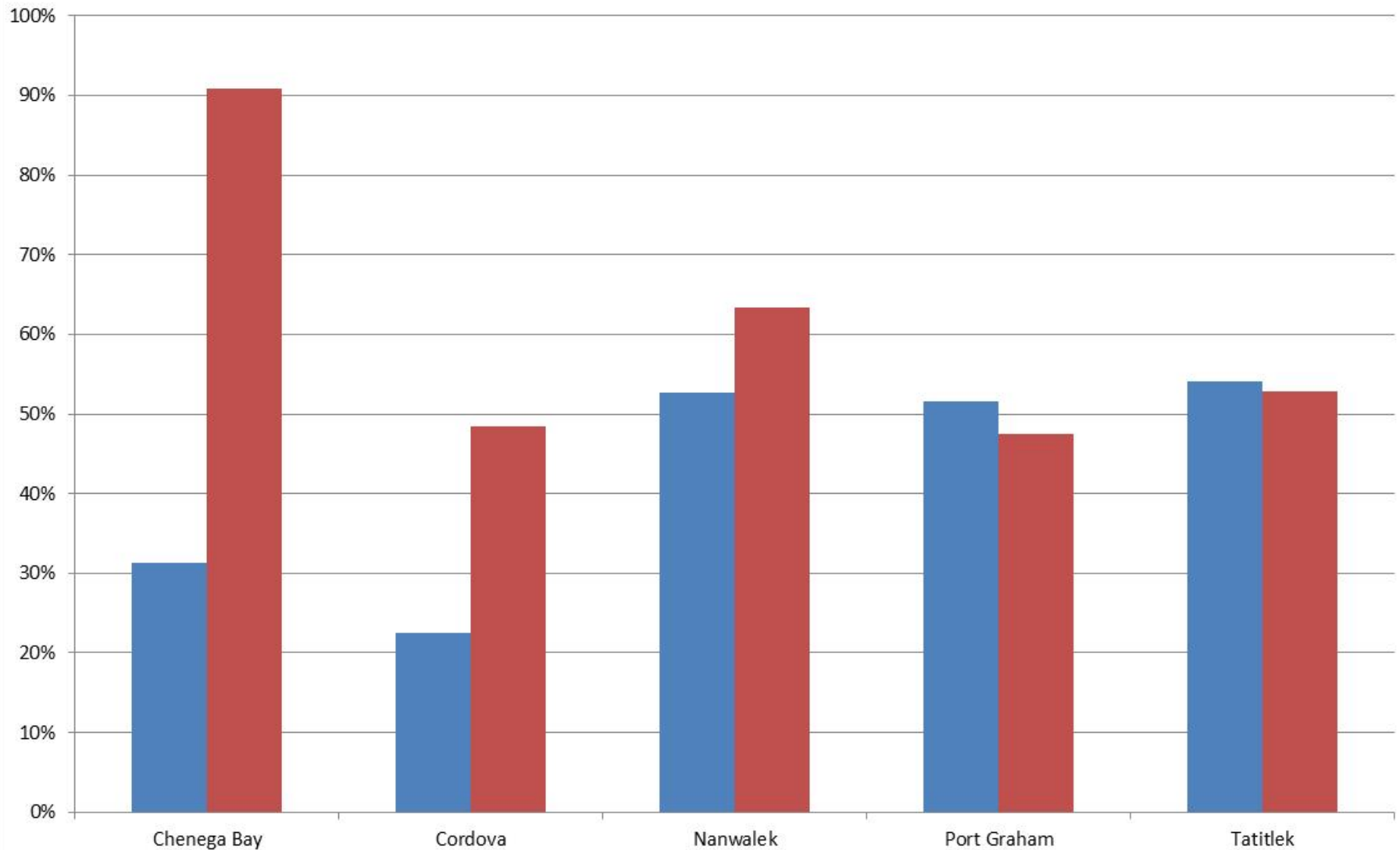
Has Influence of Elders Changed? Responses for 2014

■ Increased ■ Same ■ Decreased



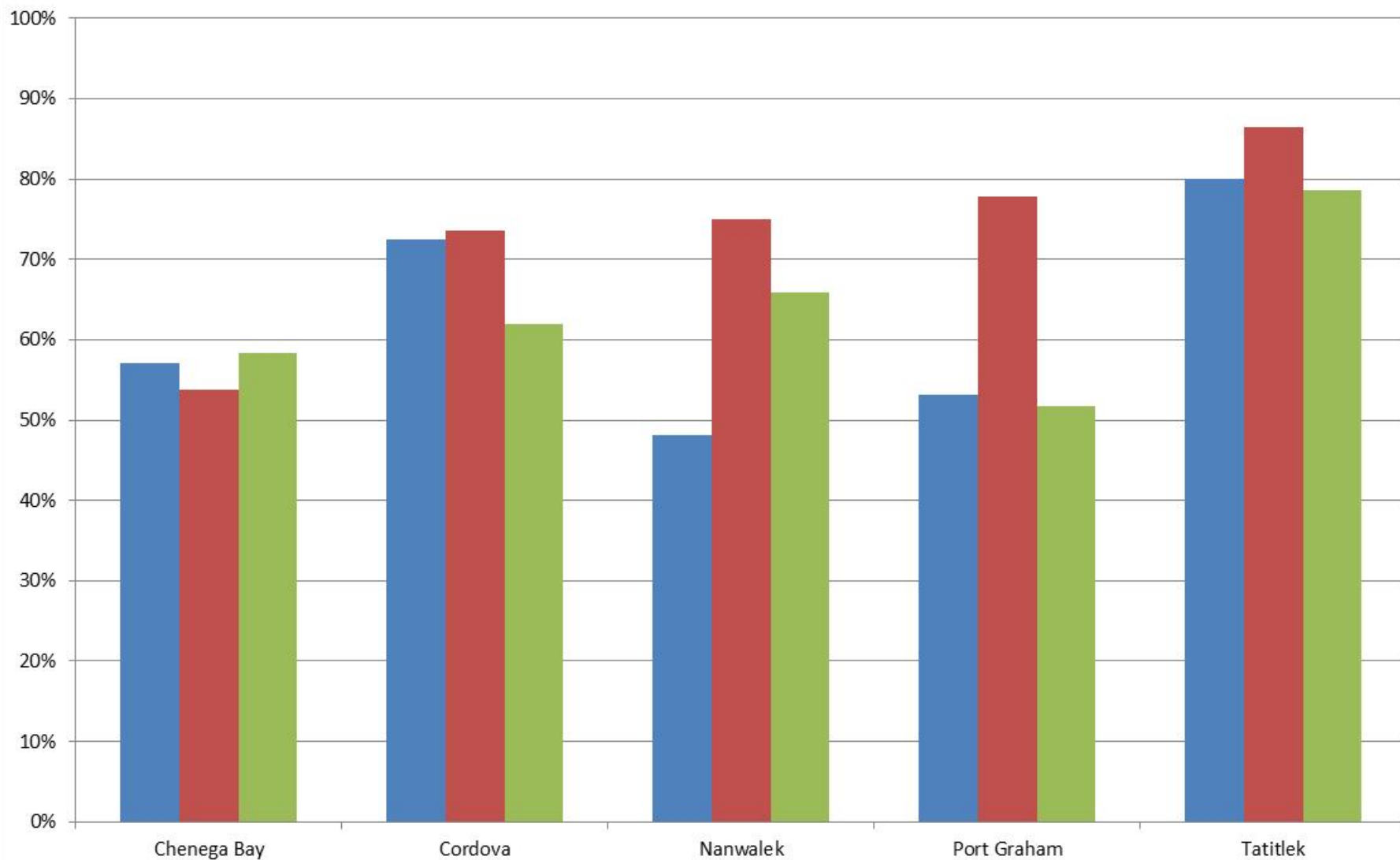
Change in Influence of Elders. Percentage Saying Influence has "Decreased"

■ 2003 ■ 2014



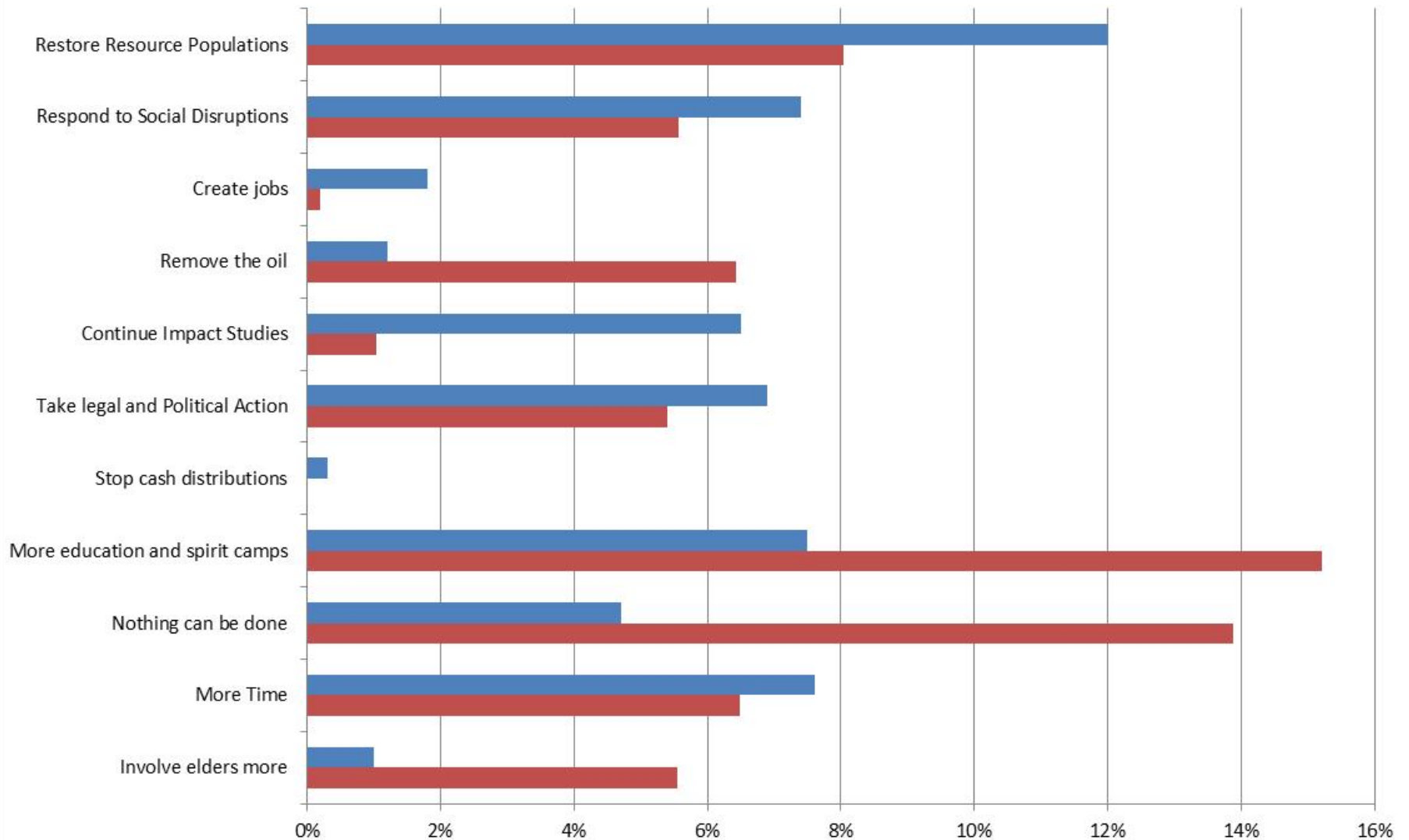
Has the Traditional Way of Life Recovered from the Affects of the Exxon Valdez Oil Spill? Percentage Saying "No"

■ 1998 ■ 2003 ■ 2014



What Should be Done to Help the Traditional Way of Life Recover? All Communities Combined

■ 2003 ■ 2014



Conclusions

- Subsistence remains a natural resource service that is “recovering” but not “recovered.”
- Evidence of “recovering”: relatively high harvests & participation levels; sharing; recovered resources; confidence in safety of eating most foods.
- Evidence of “not recovered”: lower harvests, lower diversity of use, non-recovered resources, concerns about youth involvement and role of elders

Conclusions, continued

“Subsistence harvests remain an important source of food in the study communities, include a wide range of species, are frequently shared, and provide a context for expressing and sharing the skills and values intimately linked to centuries-old traditions and future cultural survival.”

Conclusions, continued

“The oil spill initiated or contributed to a set of environmental, economic, and sociocultural conditions to which each study community must adapt. It is not possible nor necessary to completely factor out EVOS effects from this broader set of conditions. . . . A return to pre-spill conditions is impossible for spill-area communities and is not the appropriate measure of recovery. A viable future for these communities will be based on meaningful involvement in natural resource management, opportunities in the cash and subsistence sectors of the local economies, and the transmission of skills and knowledge across generations.”

For More Information

- Project summary, at EVOS TC website:
<http://www.evostc.state.ak.us/Universal/Documents/Publications/15150122ExecutiveSummary.pdf>
- Division of Subsistence Website:
<http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.main>
- Technical Papers:
<http://www.adfg.alaska.gov/sf/publications/>
- CSIS: <http://www.adfg.alaska.gov/sb/CSIS/>
- Phone: 907-267-2353 (Anchorage)