

**Rapids Research Center Chinook Sampling, 2004-2006, RapidsResearch.com**  
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The purpose of this paper is to provide some data and anecdotal information to consider when deciding whether a problem exists and how serious it is if it does, concerning declining size and loss of the older age classes of Chinook salmon in the Yukon River,.

**Some considerations:** About fifteen years ago and prior, it was not at all uncommon for Rampart/Tanana/Rapids fishwheel fishermen who fished the whole season to catch 50 pound Chinook salmon **each year**, and a 30-35 pound fish was not considered that large back then. Of note is the fact that prior to that time, our local fish buyer would only buy 14 lb king and larger as a matter of policy. Then it went to 12 lb and 10 and now, except for grayling size king we often sell any size. In the small table below you will see that the same fishermen, fishing the same gear as then, have been getting about an 11.5 lb average the past 3 years. This sample size of 2777 over 3 years is not small. Sampling done further upriver at Eagle this past summer show even lower averages, of less than 10 lbs. This is getting close to the average weight for chum salmon not king.

The following pages of Chinook weights and sex data were collected during the entire run each year. Net-caught fish were not used because of a nets inability to catch different size Chinook at ratios at all similar to the Chinook population in the river. Sampling only took place out of well-established Chinook fish wheel sites. As opposed to smaller chum salmon wheels that do catch few and smaller Chinook, these wheels each year, consistently catch the largest kings (but lower average weight) compared to nets in the commercial fishery we have (Interior AK Fish Processors, Virgil Umphenour, personnel communication). The sites are extremely stable with hard rock bottoms and wheel positions do not change from year to year.

The following tables are part of the data collected by students and their adult supervisors at Rampart Rapids 40 miles upriver of the village of Tanana. “Rapids” is located right in the middle of the state and Chinook passing there are primarily bound for Canadian spawning grounds. This particular data was collected in specific response to Chinook size and spawning quality concerns and the expressed importance for this type of data, by fishers at multiple Regional Advisory Council, State Advisory Council meetings, the last six annual YR DFA board meetings and many other fisheries gatherings in recent years.

Sampling in 2006 was funded by YR DFA but above comments are not YR DFA’s.

**Table 1. Selected 2004 -2006 Chinook Size Figures:**

| <b>Year</b>                         | <b><u>2004</u></b> | <b><u>2005</u></b> | <b><u>2006</u></b> | <b><u>2005+2006</u></b> |
|-------------------------------------|--------------------|--------------------|--------------------|-------------------------|
| * Total Chinook Project samples     | 1113               | 927                | 737                | 1664                    |
| * Average weight for all king       | n/a                | 11.4 lbs           | 11.9 lbs           | 11.7                    |
| * Average length - all males        | 67.1 cm            | 68.9 cm            | 69.0 cm            | 68.9                    |
| * Total king 30 lbs. and higher     | n/a                | 7                  | 6                  | 13                      |
| * Total king between 25 - 29.9 lbs. | n/a                | 14                 | 16                 | 30                      |

Note: “jacks” or more accurately small Chinook are less than 65.5 cm eye to tail

Each of the following pages is divided into 3 color size/sex categories, and list **weights** in columns starting from lowest to highest.

### Chinook Weights Taken in 2006, YR DFA Data Collection Project at Rapids

Chinook were weighed and the gender of each determined by full dissection or a slit made in the belly. No samples are allowed from catches if some fish were missing from a day's catch as in some were given away or already processed. Includes Some Commercial Catch Weights, , Chinook Fish Wheel Sites Only

| Large males (=>65.5 cm eye-tail) |      |      |      |      |      |      |      |      |      | Females |      | Small males ("Jacks") |     |     |      |
|----------------------------------|------|------|------|------|------|------|------|------|------|---------|------|-----------------------|-----|-----|------|
| 5.8                              | 9.3  | 10.0 | 10.8 | 11.5 | 12.1 | 12.7 | 13.6 | 15.0 | 16.3 | 10.2    | 18.5 | 3.0                   | 5.0 | 6.1 | 7.5  |
| 6.3                              | 9.3  | 10.0 | 10.9 | 11.5 | 12.1 | 12.7 | 13.6 | 15.0 | 16.5 | 10.8    | 18.5 | 3.0                   | 5.0 | 6.1 | 7.5  |
| 7.2                              | 9.4  | 10.1 | 10.9 | 11.5 | 12.2 | 12.8 | 13.6 | 15.0 | 16.5 | 11.1    | 18.6 | 3.0                   | 5.0 | 6.1 | 7.5  |
| 7.3                              | 9.4  | 10.1 | 10.9 | 11.5 | 12.2 | 12.8 | 13.6 | 15.0 | 16.7 | 11.7    | 18.9 | 3.1                   | 5.1 | 6.2 | 7.5  |
| 7.4                              | 9.4  | 10.1 | 10.9 | 11.5 | 12.2 | 12.9 | 13.7 | 15.0 | 16.7 | 12.2    | 19.1 | 3.1                   | 5.1 | 6.2 | 7.5  |
| 7.5                              | 9.5  | 10.1 | 10.9 | 11.5 | 12.2 | 12.9 | 13.7 | 15.0 | 16.9 | 12.2    | 19.4 | 3.2                   | 5.1 | 6.2 | 7.5  |
| 7.6                              | 9.5  | 10.1 | 11.0 | 11.6 | 12.2 | 12.9 | 13.8 | 15.0 | 17.0 | 12.4    | 19.4 | 3.2                   | 5.1 | 6.3 | 7.5  |
| 7.8                              | 9.5  | 10.1 | 11.0 | 11.6 | 12.2 | 12.9 | 13.8 | 15.0 | 17.0 | 12.5    | 19.5 | 3.3                   | 5.1 | 6.3 | 7.5  |
| 7.8                              | 9.6  | 10.1 | 11.0 | 11.6 | 12.2 | 13.0 | 13.9 | 15.0 | 17.0 | 12.9    | 19.6 | 3.3                   | 5.2 | 6.3 | 7.5  |
| 8.0                              | 9.6  | 10.1 | 11.0 | 11.6 | 12.2 | 13.0 | 13.9 | 15.1 | 17.0 | 12.9    | 19.7 | 3.5                   | 5.2 | 6.4 | 7.5  |
| 8.0                              | 9.6  | 10.1 | 11.0 | 11.6 | 12.2 | 13.0 | 13.9 | 15.1 | 17.1 | 13.4    | 19.8 | 3.5                   | 5.3 | 6.4 | 7.5  |
| 8.0                              | 9.6  | 10.2 | 11.0 | 11.7 | 12.3 | 13.0 | 13.9 | 15.1 | 17.3 | 13.5    | 19.9 | 3.7                   | 5.3 | 6.5 | 7.5  |
| 8.0                              | 9.6  | 10.2 | 11.0 | 11.7 | 12.3 | 13.0 | 13.9 | 15.2 | 17.3 | 13.5    | 19.9 | 3.8                   | 5.3 | 6.5 | 7.7  |
| 8.1                              | 9.6  | 10.2 | 11.0 | 11.7 | 12.3 | 13.0 | 14.0 | 15.3 | 17.5 | 13.5    | 20.2 | 3.8                   | 5.4 | 6.5 | 7.7  |
| 8.1                              | 9.7  | 10.2 | 11.1 | 11.7 | 12.3 | 13.0 | 14.0 | 15.3 | 17.6 | 13.6    | 20.7 | 3.8                   | 5.5 | 6.6 | 7.8  |
| 8.1                              | 9.7  | 10.3 | 11.1 | 11.7 | 12.3 | 13.0 | 14.0 | 15.3 | 18.1 | 13.7    | 20.8 | 3.9                   | 5.5 | 6.6 | 7.8  |
| 8.2                              | 9.7  | 10.3 | 11.1 | 11.7 | 12.3 | 13.0 | 14.0 | 15.3 | 18.2 | 14.0    | 20.9 | 3.9                   | 5.5 | 6.7 | 7.8  |
| 8.3                              | 9.7  | 10.3 | 11.1 | 11.7 | 12.3 | 13.0 | 14.0 | 15.4 | 18.5 | 14.0    | 21.0 | 4.0                   | 5.5 | 6.7 | 7.8  |
| 8.4                              | 9.8  | 10.3 | 11.2 | 11.8 | 12.3 | 13.0 | 14.0 | 15.4 | 18.5 | 14.1    | 21.1 | 4.0                   | 5.5 | 6.7 | 7.9  |
| 8.5                              | 9.8  | 10.4 | 11.2 | 11.8 | 12.4 | 13.0 | 14.1 | 15.4 | 18.6 | 14.3    | 21.2 | 4.0                   | 5.5 | 6.8 | 7.9  |
| 8.5                              | 9.8  | 10.4 | 11.2 | 11.8 | 12.4 | 13.0 | 14.1 | 15.4 | 19.3 | 14.4    | 21.5 | 4.0                   | 5.5 | 6.8 | 8.0  |
| 8.5                              | 9.8  | 10.4 | 11.2 | 11.8 | 12.4 | 13.0 | 14.2 | 15.5 | 19.9 | 14.5    | 21.6 | 4.0                   | 5.6 | 6.9 | 8.0  |
| 8.5                              | 9.8  | 10.4 | 11.2 | 11.8 | 12.4 | 13.1 | 14.3 | 15.5 | 19.9 | 14.5    | 21.9 | 4.1                   | 5.6 | 7.0 | 8.0  |
| 8.6                              | 9.8  | 10.5 | 11.2 | 11.8 | 12.4 | 13.1 | 14.3 | 15.5 | 20.0 | 14.9    | 21.9 | 4.2                   | 5.6 | 7.0 | 8.0  |
| 8.6                              | 9.9  | 10.5 | 11.2 | 11.8 | 12.5 | 13.1 | 14.4 | 15.5 | 20.2 | 15.0    | 22.5 | 4.2                   | 5.7 | 7.0 | 8.0  |
| 8.7                              | 9.9  | 10.5 | 11.2 | 11.8 | 12.5 | 13.1 | 14.4 | 15.5 | 20.4 | 15.2    | 22.5 | 4.3                   | 5.8 | 7.0 | 8.0  |
| 8.8                              | 9.9  | 10.5 | 11.3 | 11.9 | 12.5 | 13.2 | 14.4 | 15.6 | 20.5 | 15.2    | 22.9 | 4.3                   | 5.8 | 7.0 | 8.1  |
| 8.9                              | 9.9  | 10.5 | 11.3 | 11.9 | 12.5 | 13.2 | 14.4 | 15.6 | 21.1 | 15.2    | 23.5 | 4.5                   | 5.8 | 7.0 | 8.1  |
| 8.9                              | 9.9  | 10.5 | 11.3 | 11.9 | 12.5 | 13.2 | 14.5 | 15.7 | 21.9 | 15.2    | 23.7 | 4.5                   | 5.8 | 7.0 | 8.2  |
| 8.9                              | 9.9  | 10.5 | 11.3 | 12.0 | 12.5 | 13.3 | 14.5 | 15.7 | 22.4 | 15.8    | 24.2 | 4.5                   | 5.8 | 7.0 | 8.2  |
| 8.9                              | 9.9  | 10.6 | 11.3 | 12.0 | 12.5 | 13.3 | 14.5 | 15.7 | 22.8 | 15.8    | 24.5 | 4.6                   | 5.8 | 7.0 | 8.3  |
| 9.0                              | 9.9  | 10.6 | 11.3 | 12.0 | 12.5 | 13.3 | 14.5 | 15.8 | 23.0 | 16.1    | 24.9 | 4.6                   | 5.9 | 7.0 | 8.5  |
| 9.0                              | 9.9  | 10.6 | 11.4 | 12.0 | 12.5 | 13.3 | 14.5 | 15.8 | 23.4 | 16.1    | 25.1 | 4.7                   | 5.9 | 7.0 | 8.5  |
| 9.0                              | 10.0 | 10.6 | 11.4 | 12.0 | 12.5 | 13.3 | 14.5 | 15.8 | 23.5 | 16.1    | 25.3 | 4.7                   | 5.9 | 7.1 | 8.5  |
| 9.0                              | 10.0 | 10.7 | 11.4 | 12.0 | 12.5 | 13.3 | 14.6 | 15.9 | 24.5 | 16.1    | 25.5 | 4.8                   | 5.9 | 7.1 | 8.6  |
| 9.0                              | 10.0 | 10.7 | 11.4 | 12.0 | 12.5 | 13.3 | 14.7 | 16.0 | 25.7 | 16.3    | 25.6 | 4.8                   | 5.9 | 7.1 | 8.6  |
| 9.0                              | 10.0 | 10.7 | 11.4 | 12.0 | 12.5 | 13.4 | 14.7 | 16.0 | 26.5 | 16.5    | 26.0 | 4.8                   | 6.0 | 7.1 | 8.6  |
| 9.0                              | 10.0 | 10.8 | 11.4 | 12.0 | 12.5 | 13.4 | 14.7 | 16.0 | 26.9 | 16.5    | 27.0 | 4.8                   | 6.0 | 7.2 | 8.8  |
| 9.0                              | 10.0 | 10.8 | 11.4 | 12.0 | 12.6 | 13.4 | 14.7 | 16.0 | 28.0 | 16.8    | 27.0 | 4.9                   | 6.0 | 7.2 | 8.8  |
| 9.0                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.6 | 13.5 | 14.8 | 16.0 | 31.3 | 16.9    | 27.5 | 4.9                   | 6.0 | 7.2 | 8.9  |
| 9.0                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.7 | 13.5 | 14.8 | 16.1 | 33.5 | 17.1    | 28.5 | 4.9                   | 6.0 | 7.2 | 9.0  |
| 9.1                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.7 | 13.5 | 14.8 | 16.1 | 35.8 | 17.3    | 28.5 | 4.9                   | 6.0 | 7.3 | 9.0  |
| 9.1                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.7 | 13.5 | 14.8 | 16.2 |      | 17.4    | 29.5 | 5.0                   | 6.0 | 7.3 | 9.1  |
| 9.2                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.7 | 13.5 | 14.9 | 16.2 |      | 17.4    | 29.5 | 5.0                   | 6.0 | 7.3 | 9.5  |
| 9.2                              | 10.0 | 10.8 | 11.4 | 12.1 | 12.7 | 13.5 | 14.9 | 16.3 |      | 17.5    | 30.0 | 5.0                   | 6.1 | 7.4 | 9.6  |
| 9.3                              | 10.0 | 10.8 | 11.5 | 12.1 | 12.7 | 13.6 | 15.0 | 16.3 |      | 17.6    | 32.0 | 5.0                   | 6.1 | 7.4 | 9.7  |
|                                  |      |      |      |      |      |      |      |      |      | 18.2    | 49.5 | 5.0                   |     | 7.4 | 10.5 |

**Table of all Chinook Weights Taken in 2005. Chinook Fish Wheel Sites Only**

**Includes Interior AK Processors Commercial Catch at Rapids**

| Weights only for : |      | Large Males |      |      |      |      |      |      |      | Females |      |      |      |      | "Jacks" |     |     |     |     |
|--------------------|------|-------------|------|------|------|------|------|------|------|---------|------|------|------|------|---------|-----|-----|-----|-----|
| 5                  | 9.5  | 10.5        | 11   | 12   | 12.8 | 13.8 | 14.5 | 16   | 19   | 10      | 14   | 16   | 18.5 | 21.7 | 1.9     | 4.5 | 5.7 | 6.2 | 7.4 |
| 6.1                | 9.5  | 10.5        | 11.2 | 12   | 12.8 | 13.8 | 14.5 | 16   | 19   | 10      | 14   | 16   | 18.5 | 21.8 | 2       | 4.5 | 5.8 | 6.3 | 7.5 |
| 6.5                | 9.5  | 10.5        | 11.3 | 12   | 12.8 | 13.9 | 14.5 | 16   | 19.2 | 10.4    | 14   | 16.1 | 18.5 | 21.8 | 2       | 4.5 | 5.8 | 6.3 | 7.5 |
| 7.3                | 9.5  | 10.5        | 11.3 | 12   | 12.8 | 13.9 | 14.6 | 16   | 19.2 | 10.8    | 14   | 16.1 | 18.5 | 22   | 2       | 5   | 5.8 | 6.3 | 7.5 |
| 7.7                | 9.5  | 10.5        | 11.3 | 12   | 12.9 | 14   | 14.6 | 16.1 | 19.5 | 10.8    | 14   | 16.1 | 18.5 | 22   | 2       | 5   | 5.8 | 6.4 | 7.5 |
| 7.8                | 9.5  | 10.5        | 11.3 | 12   | 12.9 | 14   | 14.6 | 16.1 | 19.5 | 10.8    | 14.1 | 16.2 | 18.5 | 22.2 | 2       | 5   | 5.8 | 6.5 | 7.5 |
| 8                  | 9.6  | 10.5        | 11.3 | 12   | 12.9 | 14   | 14.7 | 16.2 | 19.6 | 10.9    | 14.1 | 16.2 | 18.5 | 22.5 | 2       | 5   | 5.9 | 6.5 | 7.5 |
| 8                  | 9.6  | 10.5        | 11.4 | 12   | 13   | 14   | 14.7 | 16.5 | 19.6 | 11      | 14.3 | 16.3 | 18.5 | 22.5 | 2       | 5   | 6   | 6.5 | 7.5 |
| 8                  | 9.6  | 10.5        | 11.4 | 12   | 13   | 14   | 14.8 | 16.5 | 19.9 | 11      | 14.3 | 16.3 | 18.6 | 22.7 | 2       | 5   | 6   | 6.5 | 7.5 |
| 8                  | 9.6  | 10.5        | 11.4 | 12.1 | 13   | 14   | 14.9 | 16.5 | 20   | 11.3    | 14.3 | 16.3 | 18.6 | 22.8 | 2       | 5   | 6   | 6.5 | 7.5 |
| 8                  | 9.6  | 10.5        | 11.4 | 12.1 | 13   | 14   | 15   | 16.5 | 20   | 11.3    | 14.4 | 16.5 | 19   | 22.9 | 2       | 5   | 6   | 6.5 | 7.5 |
| 8.3                | 9.7  | 10.5        | 11.4 | 12.2 | 13   | 14   | 15   | 16.5 | 20.1 | 11.3    | 14.5 | 16.5 | 19   | 23.1 | 2       | 5   | 6   | 6.5 | 7.6 |
| 8.4                | 9.8  | 10.5        | 11.4 | 12.2 | 13   | 14   | 15   | 16.5 | 20.7 | 11.5    | 14.5 | 16.5 | 19   | 23.5 | 2       | 5   | 6   | 6.5 | 7.6 |
| 8.5                | 9.8  | 10.5        | 11.5 | 12.2 | 13   | 14   | 15   | 16.8 | 21   | 11.5    | 14.5 | 16.5 | 19   | 24.3 | 2       | 5   | 6   | 6.5 | 7.6 |
| 8.5                | 9.9  | 10.5        | 11.5 | 12.2 | 13   | 14   | 15   | 16.9 | 21.5 | 11.8    | 14.5 | 16.5 | 19.2 | 24.5 | 2.5     | 5   | 6   | 6.5 | 7.9 |
| 8.5                | 10   | 10.6        | 11.5 | 12.3 | 13   | 14   | 15   | 16.9 | 21.5 | 11.8    | 14.5 | 16.6 | 19.2 | 24.5 | 3       | 5   | 6   | 6.5 | 7.9 |
| 8.6                | 10   | 10.6        | 11.5 | 12.3 | 13   | 14   | 15   | 17   | 22   | 12      | 14.5 | 16.7 | 19.4 | 25.2 | 3       | 5   | 6   | 6.5 | 8   |
| 8.6                | 10   | 10.6        | 11.5 | 12.3 | 13   | 14   | 15   | 17   | 22   | 12      | 14.5 | 16.9 | 19.4 | 25.4 | 3       | 5   | 6   | 6.5 | 8   |
| 8.8                | 10   | 10.6        | 11.5 | 12.3 | 13   | 14   | 15   | 17   | 22.3 | 12.2    | 14.6 | 17   | 19.5 | 25.5 | 3       | 5   | 6   | 6.5 | 8   |
| 8.8                | 10   | 10.6        | 11.5 | 12.4 | 13   | 14   | 15   | 17   | 23   | 12.2    | 14.6 | 17   | 19.5 | 27.5 | 3       | 5   | 6   | 6.5 | 8   |
| 8.9                | 10   | 10.7        | 11.5 | 12.4 | 13.1 | 14   | 15   | 17   | 23   | 12.2    | 14.7 | 17   | 19.6 | 28.4 | 3       | 5   | 6   | 6.5 | 8   |
| 9                  | 10   | 10.8        | 11.5 | 12.4 | 13.1 | 14   | 15   | 17   | 23   | 12.5    | 14.7 | 17   | 19.7 | 29.5 | 3.5     | 5   | 6   | 6.6 | 8   |
| 9                  | 10   | 10.8        | 11.5 | 12.4 | 13.2 | 14   | 15   | 17   | 23   | 12.5    | 14.8 | 17   | 19.7 | 29.8 | 3.5     | 5   | 6   | 6.7 | 8   |
| 9                  | 10   | 10.9        | 11.5 | 12.5 | 13.2 | 14   | 15   | 17   | 23   | 12.5    | 14.8 | 17   | 19.8 | 34   | 3.8     | 5   | 6   | 6.7 | 8   |
| 9                  | 10   | 10.9        | 11.5 | 12.5 | 13.2 | 14   | 15   | 17.2 | 23.5 | 12.5    | 14.9 | 17   | 20   |      | 4       | 5   | 6   | 6.7 | 8   |
| 9                  | 10   | 11          | 11.6 | 12.5 | 13.2 | 14   | 15.1 | 17.2 | 24   | 12.5    | 14.9 | 17   | 20   |      | 4       | 5   | 6   | 6.9 | 8   |
| 9                  | 10   | 11          | 11.7 | 12.5 | 13.3 | 14   | 15.2 | 17.2 | 24   | 12.5    | 15   | 17   | 20   |      | 4       | 5.3 | 6   | 7   | 8   |
| 9                  | 10   | 11          | 11.7 | 12.5 | 13.3 | 14.1 | 15.3 | 17.2 | 24   | 12.7    | 15   | 17.1 | 20   |      | 4       | 5.4 | 6   | 7   | 8   |
| 9                  | 10   | 11          | 11.7 | 12.5 | 13.3 | 14.1 | 15.3 | 17.4 | 24.5 | 12.7    | 15   | 17.1 | 20   |      | 4       | 5.5 | 6   | 7   | 8   |
| 9                  | 10   | 11          | 11.7 | 12.5 | 13.4 | 14.2 | 15.3 | 17.5 | 24.5 | 13      | 15   | 17.2 | 20   |      | 4       | 5.5 | 6   | 7   | 8   |
| 9.1                | 10   | 11          | 11.7 | 12.5 | 13.5 | 14.2 | 15.5 | 17.5 | 25   | 13      | 15.3 | 17.2 | 20   |      | 4       | 5.5 | 6   | 7   | 8   |
| 9.1                | 10   | 11          | 11.7 | 12.5 | 13.5 | 14.3 | 15.5 | 17.5 | 25   | 13      | 15.4 | 17.3 | 20.5 |      | 4       | 5.5 | 6   | 7   | 8.1 |
| 9.1                | 10   | 11          | 11.8 | 12.5 | 13.5 | 14.4 | 15.5 | 17.5 | 26.1 | 13      | 15.5 | 17.3 | 20.5 |      | 4       | 5.5 | 6   | 7   | 8.3 |
| 9.1                | 10   | 11          | 11.8 | 12.5 | 13.5 | 14.4 | 15.5 | 17.5 | 26.2 | 13.1    | 15.5 | 17.4 | 20.5 |      | 4       | 5.5 | 6   | 7   | 8.4 |
| 9.2                | 10.1 | 11          | 11.8 | 12.5 | 13.5 | 14.4 | 15.5 | 17.5 | 26.5 | 13.3    | 15.5 | 17.5 | 20.5 |      | 4       | 5.5 | 6   | 7   | 8.5 |
| 9.2                | 10.1 | 11          | 11.8 | 12.5 | 13.5 | 14.4 | 15.5 | 17.5 | 26.5 | 13.4    | 15.5 | 17.5 | 20.8 |      | 4       | 5.5 | 6   | 7   | 8.5 |
| 9.2                | 10.1 | 11          | 11.8 | 12.5 | 13.5 | 14.5 | 15.6 | 17.5 | 28.4 | 13.5    | 15.5 | 17.6 | 20.8 |      | 4.4     | 5.5 | 6   | 7   | 8.5 |
| 9.2                | 10.1 | 11          | 11.9 | 12.5 | 13.5 | 14.5 | 15.7 | 17.9 | 30   | 13.5    | 15.5 | 17.6 | 20.9 |      | 4.4     | 5.5 | 6   | 7   | 8.6 |
| 9.3                | 10.3 | 11          | 11.9 | 12.5 | 13.5 | 14.5 | 15.7 | 18   | 30.5 | 13.6    | 15.5 | 17.7 | 21   |      | 4.5     | 5.5 | 6   | 7   | 8.8 |
| 9.3                | 10.3 | 11          | 11.9 | 12.5 | 13.5 | 14.5 | 15.8 | 18   | 33   | 13.6    | 15.6 | 17.8 | 21   |      | 4.5     | 5.5 | 6   | 7.1 | 8.8 |
| 9.3                | 10.4 | 11          | 11.9 | 12.5 | 13.5 | 14.5 | 15.9 | 18   | 34   | 13.7    | 15.8 | 17.9 | 21   |      | 4.5     | 5.5 | 6   | 7.1 | 9   |
| 9.3                | 10.4 | 11          | 12   | 12.6 | 13.5 | 14.5 | 15.9 | 18   | 34.2 | 13.7    | 15.8 | 18   | 21   |      | 4.5     | 5.5 | 6   | 7.2 | 9   |
| 9.3                | 10.4 | 11          | 12   | 12.6 | 13.5 | 14.5 | 15.9 | 18.3 | 35   | 13.8    | 16   | 18   | 21   |      | 4.5     | 5.5 | 6   | 7.2 | 9   |
| 9.4                | 10.4 | 11          | 12   | 12.6 | 13.5 | 14.5 | 16   | 18.4 |      | 13.9    | 16   | 18   | 21   |      | 4.5     | 5.5 | 6   | 7.2 | 11  |
| 9.5                | 10.4 | 11          | 12   | 12.7 | 13.6 | 14.5 | 16   | 18.5 |      | 13.9    | 16   | 18   | 21.3 |      | 4.5     | 5.6 | 6   | 7.3 |     |
| 9.5                | 10.4 | 11          | 12   | 12.7 | 13.6 | 14.5 | 16   | 18.5 |      | 14      | 16   | 18   | 21.5 |      | 4.5     | 5.7 | 6.1 | 7.3 |     |
| 9.5                | 10.4 | 11          | 12   | 12.7 | 13.7 | 14.5 | 16   | 18.8 |      | 14      | 16   | 18.3 | 21.5 |      | 4.5     | 5.7 | 6.1 | 7.4 |     |
| 9.5                | 10.5 | 11          | 12   | 12.7 | 13.7 | 14.5 | 16   | 18.8 |      | 14      | 16   | 18.3 | 21.5 |      | 4.5     | 5.7 | 6.2 | 7.4 |     |