# Fish Passage Plan (FPP) Change Request Form

**Change Form # & Title**: 21MCN002 – McNary Dam modified spill tables

**Date Submitted**: 18 December 2020

**Project**: McNary Dam

**Requester Name, Agency**: William Gersbach. CENWW-ODM

**Final Action:** **APPROVED – 11 February 2021**

**FPP Section**: Spill Pattern Tables MCN-7 (with TSWs) and MCN-9 (No TSWs).

**Justification for Change**: Excessive wear and tear from operating beyond the designed capabilities has increased risk of failure for critical flood emergency response equipment. Limiting the number of times the electrical relays for spillway cranes are operated will help ensure that they will be fully functional when needed for emergency flood situations.

**Proposed Change**: Set the spill gates in bays 2 and 19, at the locations of spillway cranes 6 and 7, to a static opening of gate step 4.

See modified spill pattern tables on the pages below.

**Comments**:

28-Jan-2021 FPOM FPP Meeting:

* Bettin asked if the TSW patterns could keep bay 2 closed until a higher spill rate, similar to what’s proposed for the no TSW patterns.
* Lorz has concerns with locking bay 2 at four stops for all spill levels and would prefer to see the patterns defined in bands where bay 2 is open a set number of stops over a range of spill (i.e., the project would adjust bay 2 a couple times a season rather than just locking it at four stops). His concern is at higher spill levels there will be a hole in the pattern at bay 2.
* Peery said there are plans to get a new gear box for crane 7 sometime this year but no date yet. So these modified patterns would just be until the fix is made.
* Peery will work with the project and Laughery to see if the patterns can be revised as recommended. PENDING – will be revised and reviewed at FPOM on February 11.

4-FEB-2021 email from Chris Peery: “Attached are revised spill tables for McNary Dam, produced by Ryan Laughery and reviewed by the project, for inclusion with 21MCN002.”

11-FEB-2021 FPOM: Lorz had concerns with certain flow bands where they might have to switch back and forth. Peery responded that issue was considered in the revised patterns. Peery will provide more info on the timeline for repairs. Once they’re complete, the FPP will be changed back to the normal spill patterns.

**Record of Final Action**: Approved at the FPOM meeting on 11-FEB-2021.

**Table MCN-7. [*pg 1 of 5*] McNary Dam Spill Patterns for Fish Passage with TSWs in Bays 19-20 and Bay 2 Locked at 4 or 6 Stops.**

| **MCN Spill Patterns with TSWs (# Gate Stops per Spillbay) and Bay 2 Locked at 4 or 6 Stops (in effect until crane repairs are completed)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **Total Stops** | | **Spill a** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** b | **2** | **3** | | **4** | **5** | **6** | **7** | | **8** | **9** | | **10** | | **11** | **12** | | **13** | | **14** | | **15** | | **16** | | **17** | | **18** | | **19** | **20** | **21** | **22** b | **(#)** | | **(kcfs)** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | |  | | TSW | | TSW | 1 |  | | **1** | **21.2** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | | 1 | | TSW | | TSW | 1 |  | | **2** | **23.2** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | | 1 | | TSW | | TSW | 1 | 1 | | **3** | **25.2** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | | 1 | | TSW | | TSW | 2 | 1 | | **4** | **27.1** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | | 2 | | TSW | | TSW | 2 | 1 | | **5** | **29.0** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | | 1 | | 2 | | TSW | | TSW | 2 | 1 | | **6** | **31.0** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | | 2 | | 2 | | TSW | | TSW | 2 | 1 | | **7** | **32.9** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | | 1 | |  | | 2 | | 2 | | TSW | | TSW | 2 | 1 | | **8** | **34.9** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | | 1 | |  | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **9** | **36.8** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | | 2 | |  | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **10** | **38.7** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **11** | **40.7** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **12** | **42.6** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | | 1 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **13** | **44.6** |
|  |  |  |  | |  |  | |  |  |  |  | |  | |  |  | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **14** | **46.5** |
|  |  |  |  | |  |  | |  |  |  |  | | 1 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **15** | **48.5** |
|  |  |  |  | |  |  | |  |  |  |  | | 2 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **16** | **50.4** |
|  |  |  |  | |  |  | |  |  | 1 |  | | 2 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **17** | **52.4** |
|  |  |  |  | |  |  | |  |  | 2 |  | | 2 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **18** | **54.3** |
|  |  |  |  | |  |  | |  |  | 2 | 1 | | 2 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **19** | **56.3** |
|  |  |  |  | |  |  | |  |  | 2 | 2 | | 2 | |  | 2 | |  | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **20** | **58.2** |
|  |  |  |  | |  |  | |  |  | 2 | 2 | | 2 | |  | 2 | | 1 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **21** | **60.2** |
|  |  |  |  | |  |  | |  |  | 2 | 2 | | 2 | |  | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **22** | **62.1** |
|  |  |  |  | |  |  | |  |  | 2 | 2 | | 2 | | 1 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **23** | **64.1** |
|  |  |  |  | |  |  | |  |  | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **24** | **66.0** |
|  |  |  |  | |  |  | | 1 |  | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **25** | **68.0** |
|  |  |  |  | |  |  | | 2 |  | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **26** | **69.9** |
|  |  |  |  | | 1 |  | | 2 |  | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **27** | **71.9** |
| 2.5 |  | 3.5 |  | | 2 |  | | 2 |  | 2 |  | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **28** | **71.7** |
| 2.5 |  | 3.5 |  | | 2 | 1 | | 2 |  | 2 |  | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **29** | **73.7** |
| 2.5 |  | 3.5 |  | | 2 | 1 | | 2 |  | 2 | 1 | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **30** | **75.7** |
| 2.5 |  | 3.5 |  | | 2 | 1 | | 2 |  | 2 | 1 | | 2 | | 1 | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **31** | **77.7** |
| 2.5 | 4 | 3.5 |  | | 2 |  | | 2 |  | 2 |  | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **32** | **78.9** |
| 2.5 | 4 | 3.5 |  | | 2 | 1 | | 2 |  | 2 |  | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **33** | **80.9** |
| 2.5 | 4 | 3.5 |  | | 2 | 1 | | 2 |  | 2 | 1 | | 2 | |  | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **34** | **82.9** |
| 2.5 | 4 | 3.5 |  | | 2 | 1 | | 2 |  | 2 | 1 | | 2 | | 1 | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **35** | **84.9** |
| 2.5 | 4 | 3.5 |  | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **36** | **86.9** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 2 | 2 | | **37** | **88.9** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 1 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 3 | 2 | | **38** | **90.6** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 2 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 3 | 2 | | **39** | **92.5** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 2 | | 2 | | 1 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **40** | **94.2** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 1 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **41** | **96.1** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 2 | | 2 | 1 | 2 | 1 | | 2 | | 1 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **42** | **98.0** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 2 | | 2 | 1 | 2 | 2 | | 2 | | 1 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **43** | **99.9** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 2 | | 2 | 1 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **44** | **101.8** |
| 2.5 | 4 | 3.5 | 1 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **45** | **103.7** |
| 2.5 | 4 | 3.5 | 2 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **46** | **105.6** |
| 3 | 4 | 4 | 2 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **47** | **108.9** |
| 3 | 4 | 4 | 2 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 3 | | 2 | | 2 | | TSW | | TSW | 3 | 3 | | **48** | **110.6** |
| 3 | 4 | 4 | 2 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 3 | | 2 | | 3 | | TSW | | TSW | 3 | 3 | | **49** | **112.3** |
| 3 | 4 | 4 | 3 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 3 | | 2 | | 3 | | TSW | | TSW | 3 | 3 | | **50** | **114.0** |
| 3 | 4 | 4 | 3 | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **51** | **115.7** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 2 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **52** | **117.4** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **53** | **119.1** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 3 | 2 | 2 | | 2 | | 2 | 2 | | 2 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **54** | **120.8** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 3 | 2 | 2 | | 2 | | 2 | 3 | | 2 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **55** | **122.5** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 3 | 2 | 3 | | 2 | | 2 | 3 | | 2 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **56** | **124.2** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 3 | 2 | 3 | | 2 | | 3 | 3 | | 2 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **57** | **125.9** |
| 3 | 4 | 4 | 3 | | 2 | 3 | | 2 | 3 | 2 | 3 | | 2 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **58** | **127.6** |
| 3 | 4 | 5 | 3 | | 2 | 3 | | 2 | 3 | 2 | 3 | | 2 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **59** | **129.2** |
| 3 | 4 | 5 | 3 | | 3 | 3 | | 2 | 3 | 2 | 3 | | 2 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **60** | **130.9** |
| 3 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 2 | 3 | | 2 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **61** | **132.6** |
| 3 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 2 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **62** | **134.3** |
| 3 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 2 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **62** | **134.3** |
| 3 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **63** | **136.0** |
| 4 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 3 | | TSW | | TSW | 3 | 3 | | **64** | **137.6** |
| 4 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 3 | | 4 | | TSW | | TSW | 3 | 3 | | **65** | **139.2** |
| 4 | 4 | 5 | 3 | | 3 | 3 | | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **66** | **140.8** |
| 4 | 4 | 5 | 3 | | 3 | 3 | | 4 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | | 3 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **67** | **142.4** |
| 4 | 4 | 5 | 3 | | 3 | 3 | | 4 | 3 | 3 | 3 | | 4 | | 3 | 3 | | 3 | | 3 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **68** | **144.0** |
| 4 | 4 | 5 | 3 | | 4 | 3 | | 4 | 3 | 3 | 3 | | 4 | | 3 | 3 | | 3 | | 3 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **69** | **145.6** |
| 4 | 4 | 5 | 3 | | 4 | 3 | | 4 | 3 | 3 | 3 | | 4 | | 3 | 3 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **70** | **147.2** |
| 4 | 4 | 5 | 3 | | 4 | 3 | | 4 | 3 | 4 | 3 | | 4 | | 3 | 3 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **71** | **148.8** |
| 4 | 4 | 5 | 3 | | 4 | 3 | | 4 | 3 | 4 | 3 | | 4 | | 3 | 4 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **72** | **150.4** |
| 4 | 4 | 5 | 3 | | 4 | 4 | | 4 | 3 | 4 | 3 | | 4 | | 3 | 4 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **73** | **152.0** |
| 4 | 4 | 5 | 3 | | 4 | 4 | | 4 | 3 | 4 | 4 | | 4 | | 3 | 4 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **74** | **153.6** |
| 4 | 4 | 5 | 3 | | 4 | 4 | | 4 | 3 | 4 | 4 | | 4 | | 4 | 4 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **75** | **155.2** |
| 4 | 4 | 5 | 3 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 3 | | 4 | | 3 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **76** | **156.8** |
| 4 | 4 | 5 | 3 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 3 | | 4 | | 4 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **77** | **158.4** |
| 4 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 3 | | 4 | | 4 | | 4 | | 4 | | TSW | | TSW | 3 | 3 | | **78** | **160.0** |
| 4 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 3 | | 4 | | 4 | | 4 | | 4 | | TSW | | TSW | 4 | 3 | | **79** | **161.6** |
| 4 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 4 | | 4 | | 4 | | 4 | | 4 | | TSW | | TSW | 4 | 3 | | **80** | **163.2** |
| 5 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 4 | | 4 | | 4 | | 4 | | 4 | | TSW | | TSW | 4 | 3 | | **81** | **164.8** |
| 5 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 4 | | 4 | | 4 | | 4 | | 5 | | TSW | | TSW | 4 | 3 | | **82** | **166.4** |
| 5 | 4 | 5 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 4 | | 4 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **83** | **168.0** |
| 5 | 4 | 5 | 4 | | 4 | 4 | | 5 | 4 | 4 | 4 | | 4 | | 4 | 4 | | 4 | | 4 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **84** | **169.6** |
| 5 | 4 | 5 | 4 | | 4 | 4 | | 5 | 4 | 4 | 4 | | 5 | | 4 | 4 | | 4 | | 4 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **85** | **171.2** |
| 5 | 4 | 5 | 4 | | 5 | 4 | | 5 | 4 | 4 | 4 | | 5 | | 4 | 4 | | 4 | | 4 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **86** | **172.8** |
| 5 | 4 | 5 | 4 | | 5 | 4 | | 5 | 4 | 4 | 4 | | 5 | | 4 | 4 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **87** | **174.4** |
| 5 | 4 | 5 | 4 | | 5 | 4 | | 5 | 4 | 5 | 4 | | 5 | | 4 | 4 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **88** | **176.0** |
| 5 | 4 | 5 | 4 | | 5 | 4 | | 5 | 4 | 5 | 4 | | 5 | | 4 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 4 | 3 | | **89** | **177.6** |
| 5 | 4 | 5 | 4 | | 5 | 4 | | 5 | 4 | 5 | 4 | | 5 | | 4 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **90** | **179.2** |
| 5 | 4 | 5 | 4 | | 5 | 5 | | 5 | 4 | 5 | 4 | | 5 | | 4 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **91** | **180.8** |
| 5 | 4 | 5 | 4 | | 5 | 5 | | 5 | 4 | 5 | 5 | | 5 | | 4 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **92** | **182.4** |
| 5 | 4 | 5 | 4 | | 5 | 5 | | 5 | 4 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **93** | **184.0** |
| 5 | 4 | 5 | 4 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 4 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **94** | **185.6** |
| 5 | 4 | 5 | 4 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **95** | **187.2** |
| 5 | 4 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 3 | | **96** | **188.8** |
| 5 | 4 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 4 | | **97** | **190.4** |
| 5 | 4 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 4 | | **98** | **192.0** |
| 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 4 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 4 | | **99** | **193.6** |
| 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 5 | | TSW | | TSW | 5 | 4 | | **100** | **195.2** |
| 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 6 | | TSW | | TSW | 5 | 4 | | **101** | **196.8** |
| 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 6 | | TSW | | TSW | 5 | 5 | | **102** | **198.4** |
| 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 6 | | TSW | | TSW | 6 | 5 | | **103** | **200.0** |
| 5 | 6 | 6 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 5 | | 6 | | TSW | | TSW | 6 | 5 | | **104** | **201.6** |
| 5 | 6 | 6 | 5 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **105** | **203.2** |
| 5 | 6 | 6 | 6 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 5 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **106** | **204.8** |
| 5 | 6 | 6 | 6 | | 5 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **107** | **206.4** |
| 5 | 6 | 6 | 6 | | 6 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 5 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **108** | **208.0** |
| 5 | 6 | 6 | 6 | | 6 | 5 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **109** | **209.6** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 5 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **110** | **211.2** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **111** | **212.8** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 5 | 5 | 5 | | 5 | | 5 | 5 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **112** | **214.4** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 5 | 5 | 5 | | 5 | | 5 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **113** | **216.0** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 5 | 5 | | 5 | | 5 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **114** | **217.6** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 5 | 5 | | 5 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **115** | **219.2** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 5 | | 5 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **116** | **220.8** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 5 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **117** | **222.4** |
| 5 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **118** | **224.0** |
| 6 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 6 | | TSW | | TSW | 6 | 5 | | **119** | **225.6** |
| 6 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 7 | | TSW | | TSW | 6 | 5 | | **120** | **227.2** |
| 6 | 6 | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 6 | | 7 | | TSW | | TSW | 7 | 6 | | **122** | **230.4** |
| 6 | 6 | 7 | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 6 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **124** | **233.6** |
| 6 | 6 | 7 | 7 | | 6 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 6 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **126** | **236.8** |
| 6 | 6 | 7 | 7 | | 7 | 6 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 6 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **128** | **240.0** |
| 6 | 6 | 7 | 7 | | 7 | 7 | | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | | 7 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **130** | **243.2** |
| 6 | 6 | 7 | 7 | | 7 | 7 | | 7 | 6 | 6 | 6 | | 6 | | 6 | 7 | | 7 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **132** | **246.4** |
| 6 | 6 | 7 | 7 | | 7 | 7 | | 7 | 7 | 6 | 6 | | 6 | | 7 | 7 | | 7 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **134** | **249.6** |
| 6 | 6 | 7 | 7 | | 7 | 7 | | 7 | 7 | 7 | 6 | | 7 | | 7 | 7 | | 7 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **136** | **252.8** |
| 7 | 6 | 7 | 7 | | 7 | 7 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 7 | | 7 | | 7 | | 7 | | TSW | | TSW | 7 | 6 | | **138** | **256.0** |
| 7 | 6 | 7 | 7 | | 7 | 7 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 7 | | 7 | | 7 | | 8 | | TSW | | TSW | 7 | 7 | | **140** | **259.3** |
| 7 | 6 | 8 | 7 | | 7 | 7 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 7 | | 7 | | 7 | | 8 | | TSW | | TSW | 8 | 7 | | **142** | **262.7** |
| 7 | 6 | 8 | 8 | | 7 | 7 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 7 | | 7 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **144** | **266.1** |
| 7 | 6 | 8 | 8 | | 8 | 7 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 7 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **146** | **269.5** |
| 7 | 6 | 8 | 8 | | 8 | 8 | | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 7 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **148** | **272.9** |
| 7 | 6 | 8 | 8 | | 8 | 8 | | 8 | 7 | 7 | 7 | | 7 | | 7 | 7 | | 8 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **150** | **276.3** |
| 7 | 6 | 8 | 8 | | 8 | 8 | | 8 | 8 | 7 | 7 | | 7 | | 7 | 8 | | 8 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **152** | **279.7** |
| 7 | 6 | 8 | 8 | | 8 | 8 | | 8 | 8 | 8 | 7 | | 7 | | 8 | 8 | | 8 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **154** | **283.1** |
| 7 | 6 | 8 | 8 | | 8 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 7 | | **156** | **286.5** |
| 8 | 6 | 8 | 8 | | 8 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 8 | | 8 | | 8 | | 8 | | TSW | | TSW | 8 | 8 | | **158** | **289.9** |
| 8 | 6 | 8 | 8 | | 8 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 8 | | 8 | | 8 | | 9 | | TSW | | TSW | 9 | 8 | | **160** | **293.1** |
| 8 | 6 | 9 | 8 | | 8 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 8 | | 8 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **162** | **296.3** |
| 8 | 6 | 9 | 9 | | 8 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 8 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **164** | **299.5** |
| 8 | 6 | 9 | 9 | | 9 | 8 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 8 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **166** | **302.7** |
| 8 | 6 | 9 | 9 | | 9 | 9 | | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | | 9 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **168** | **305.9** |
| 8 | 6 | 9 | 9 | | 9 | 9 | | 9 | 8 | 8 | 8 | | 8 | | 8 | 9 | | 9 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **170** | **309.1** |
| 8 | 6 | 9 | 9 | | 9 | 9 | | 9 | 9 | 8 | 8 | | 8 | | 9 | 9 | | 9 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **172** | **312.3** |
| 8 | 6 | 9 | 9 | | 9 | 9 | | 9 | 9 | 9 | 8 | | 9 | | 9 | 9 | | 9 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **174** | **315.5** |
| 9 | 6 | 9 | 9 | | 9 | 9 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 9 | | 9 | | 9 | | 9 | | TSW | | TSW | 9 | 8 | | **176** | **318.7** |
| 9 | 6 | 9 | 9 | | 9 | 9 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 9 | | 9 | | 9 | | 10 | | TSW | | TSW | 9 | 9 | | **178** | **321.9** |
| 9 | 6 | 10 | 9 | | 9 | 9 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 9 | | 9 | | 9 | | 10 | | TSW | | TSW | 10 | 9 | | **180** | **325.1** |
| 9 | 6 | 10 | 10 | | 9 | 9 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 9 | | 9 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **182** | **328.3** |
| 9 | 6 | 10 | 10 | | 10 | 9 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 9 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **184** | **331.5** |
| 9 | 6 | 10 | 10 | | 10 | 10 | | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 9 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **186** | **334.7** |
| 9 | 6 | 10 | 10 | | 10 | 10 | | 10 | 9 | 9 | 9 | | 9 | | 9 | 9 | | 10 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **188** | **337.9** |
| 9 | 6 | 10 | 10 | | 10 | 10 | | 10 | 10 | 9 | 9 | | 9 | | 9 | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **190** | **341.1** |
| 9 | 6 | 10 | 10 | | 10 | 10 | | 10 | 10 | 10 | 9 | | 9 | | 10 | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **192** | **344.3** |
| 9 | 6 | 10 | 10 | | 10 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 9 | | **194** | **347.5** |
| 10 | 6 | 10 | 10 | | 10 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | TSW | | TSW | 10 | 10 | | **196** | **350.7** |
| 10 | 6 | 10 | 10 | | 10 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 10 | | 10 | | 10 | | 11 | | TSW | | TSW | 11 | 10 | | **198** | **353.7** |
| 10 | 6 | 11 | 10 | | 10 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 10 | | 10 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **200** | **356.7** |
| 10 | 6 | 11 | 11 | | 10 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 10 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **202** | **359.7** |
| 10 | 6 | 11 | 11 | | 11 | 10 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 10 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **204** | **362.7** |
| 10 | 6 | 11 | 11 | | 11 | 11 | | 10 | 10 | 10 | 10 | | 10 | | 10 | 10 | | 11 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **206** | **365.7** |
| 10 | 6 | 11 | 11 | | 11 | 11 | | 11 | 10 | 10 | 10 | | 10 | | 10 | 11 | | 11 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **208** | **368.7** |
| 10 | 6 | 11 | 11 | | 11 | 11 | | 11 | 11 | 10 | 10 | | 10 | | 11 | 11 | | 11 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **210** | **371.7** |
| 10 | 6 | 11 | 11 | | 11 | 11 | | 11 | 11 | 11 | 10 | | 11 | | 11 | 11 | | 11 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **212** | **374.7** |
| 11 | 6 | 11 | 11 | | 11 | 11 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 11 | | 11 | | 11 | | 11 | | TSW | | TSW | 11 | 10 | | **214** | **377.7** |
| 11 | 6 | 11 | 11 | | 11 | 11 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 11 | | 11 | | 11 | | 12 | | TSW | | TSW | 11 | 11 | | **216** | **380.8** |
| 11 | 6 | 12 | 11 | | 11 | 11 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 11 | | 11 | | 11 | | 12 | | TSW | | TSW | 12 | 11 | | **218** | **384** |
| 11 | 6 | 12 | 12 | | 11 | 11 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 11 | | 11 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **220** | **387.2** |
| 11 | 6 | 12 | 12 | | 12 | 11 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 11 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **222** | **390.4** |
| 11 | 6 | 12 | 12 | | 12 | 12 | | 11 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 11 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **224** | **393.6** |
| 11 | 6 | 12 | 12 | | 12 | 12 | | 12 | 11 | 11 | 11 | | 11 | | 11 | 11 | | 12 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **226** | **396.8** |
| 11 | 6 | 12 | 12 | | 12 | 12 | | 12 | 12 | 11 | 11 | | 11 | | 11 | 12 | | 12 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **228** | **400** |
| 11 | 6 | 12 | 12 | | 12 | 12 | | 12 | 12 | 12 | 11 | | 11 | | 12 | 12 | | 12 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **230** | **403.2** |
| 11 | 6 | 12 | 12 | | 12 | 12 | | 12 | 12 | 12 | 12 | | 12 | | 12 | 12 | | 12 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 11 | | **232** | **406.4** |
| 12 | 6 | 12 | 12 | | 12 | 12 | | 12 | 12 | 12 | 12 | | 12 | | 12 | 12 | | 12 | | 12 | | 12 | | 12 | | 12 | | TSW | | TSW | 12 | 12 | | **234** | **409.6** |
| 12 | 6 | 12 | 12 | | 12 | 12 | | 12 | 12 | 12 | 12 | | 12 | | 12 | 12 | | 12 | | 12 | | 12 | | 12 | | 13 | | TSW | | TSW | 13 | 12 | | **236** | **412.8** |
| 12 | 6 | 13 | 12 | | 12 | 12 | | 12 | 12 | 12 | 12 | | 12 | | 12 | 12 | | 12 | | 12 | | 12 | | 13 | | 13 | | TSW | | TSW | 13 | 12 | | **238** | **416** |

**Table MCN-9. [*pg 1 of 5*]. McNary Dam Spill Patterns with No TSWs and Bays 2 and 19 Locked at 4 or 6 Stops.**

| **MCN Spill Patterns with NO TSWs (# Gate Stops per Spillbay) and Bays 2, 19 Locked at 4 or 6 Stops (in effect until crane repairs are completed)** | | | | | | | | | | | | | | | | | | | | | | | | **Total Stops** | **Spill a** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** b | **2** | **3** | **4** | **5** | | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | | **16** | **17** | **18** | **19** | **20** | **21** | **22** b | **(#)** | **(kcfs)** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  | 4 |  |  |  | **4** | **7.2** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  | 1 | 4 |  |  |  | **5** | **9.2** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  | 2 | 4 |  |  |  | **6** | **11.1** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  | 2 | 4 | 1 |  |  | **7** | **13.1** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  | 2 | 4 | 2 |  |  | **8** | **15.0** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  | 1 | |  |  | 2 | 4 | 2 |  |  | **9** | **17.0** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  | 2 | |  |  | 2 | 4 | 2 |  |  | **10** | **18.9** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  | 1 | 2 | |  |  | 2 | 4 | 2 |  |  | **11** | **20.9** |
|  |  |  |  |  | |  |  |  |  |  |  |  |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **12** | **22.8** |
|  |  |  |  |  | |  |  |  |  |  |  | 1 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **13** | **24.8** |
|  |  |  |  |  | |  |  |  |  |  |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **14** | **26.7** |
|  |  |  |  |  | |  |  |  |  | 1 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **15** | **28.7** |
|  |  |  |  |  | |  |  |  |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **16** | **30.6** |
|  |  |  |  |  | |  |  | 1 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **17** | **32.6** |
|  |  |  |  |  | |  |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **18** | **34.5** |
|  |  |  |  |  | | 1 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **19** | **36.5** |
|  |  |  |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **20** | **38.4** |
|  |  | 1 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **21** | **40.4** |
|  |  | 2 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **22** | **42.3** |
|  |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **23** | **44.0** |
| 1 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **24** | **46.0** |
| 2 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **25** | **47.9** |
| 3 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  |  | 2 | 4 | 2 |  |  | **26** | **49.6** |
| 3 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 1 | 2 | 4 | 2 |  |  | **27** | **51.6** |
| 3 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 2 | 4 | 2 |  |  | **28** | **53.5** |
| 3 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 3 | 4 | 2 |  |  | **29** | **55.2** |
| 3 |  | 3 |  |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **30** | **56.8** |
| 3 |  | 3 | 1 |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **31** | **58.8** |
| 3 |  | 3 | 2 |  | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **32** | **60.7** |
| 3 |  | 3 | 2 | 1 | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **33** | **62.7** |
| 3 |  | 3 | 2 | 2 | | 2 |  | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **34** | **64.6** |
| 3 |  | 3 | 2 | 2 | | 2 | 1 | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **35** | **66.6** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 |  | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **36** | **68.5** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 1 | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **37** | **70.5** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |  | 2 |  | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **38** | **72.4** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |  | 2 | 1 | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **39** | **74.4** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |  | 2 | 2 | 2 | 2 | |  | 2 | 4 | 4 | 2 |  |  | **40** | **76.3** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |  | 2 | 2 | 2 | 2 | | 1 | 2 | 4 | 4 | 2 |  |  | **41** | **78.3** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |  | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **42** | **80.2** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **43** | **82.2** |
| 3 |  | 3 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **44** | **84.1** |
| 3 |  | 4 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **45** | **85.7** |
| 3 |  | 5 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **46** | **87.3** |
| 3 |  | 5 | 3 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **47** | **89.0** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **48** | **90.7** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **49** | **92.4** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **50** | **94.1** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | | 2 | 2 | 4 | 4 | 2 |  |  | **51** | **95.8** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 2 | 4 | 4 | 2 |  |  | **52** | **97.5** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 |  |  | **53** | **99.2** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 1 |  | **54** | **101.2** |
| 3 |  | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 |  | **55** | **103.1** |
| 3 | 4 | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 2 | 4 | 4 | 2 |  |  | **56** | **104.7** |
| 3 | 4 | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 |  |  | **57** | **106.4** |
| 3 | 4 | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 1 |  | **58** | **108.4** |
| 3 | 4 | 5 | 3 | 2 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 |  | **59** | **110.3** |
| 3 | 4 | 5 | 3 | 3 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 |  | **60** | **112.0** |
| 3 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 |  | **61** | **113.7** |
| 3 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 | 1 | **62** | **115.7** |
| 3 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 2 | 2 | **63** | **117.6** |
| 3 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **64** | **119.3** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **65** | **120.9** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **66** | **122.6** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **67** | **124.3** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **68** | **126.0** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 2 | 3 | 4 | 4 | 2 | 3 | 2 | **69** | **127.7** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 2 | 3 | 2 | **70** | **129.4** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 3 | 3 | 2 | **71** | **131.1** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 3 | 3 | 3 | **72** | **132.8** |
| 4 | 4 | 5 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **73** | **134.4** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **74** | **136.0** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **75** | **137.6** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **76** | **139.2** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **77** | **140.8** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **78** | **142.4** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 3 | 4 | 4 | 4 | 3 | 3 | **79** | **144.0** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 4 | 4 | 4 | 4 | 3 | 3 | **80** | **145.6** |
| 4 | 4 | 5 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 4 | 4 | 4 | 5 | 3 | 3 | **81** | **147.2** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 4 | 4 | 4 | 5 | 3 | 3 | **82** | **148.8** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 4 | 4 | 4 | 5 | 3 | 4 | **83** | **150.4** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 3 | 4 | 4 | 4 | 5 | 4 | 4 | **84** | **152.0** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **85** | **153.6** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **86** | **155.2** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **87** | **156.8** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **88** | **158.4** |
| 4 | 4 | 6 | 3 | 4 | | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **89** | **160.0** |
| 4 | 4 | 6 | 3 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **90** | **161.6** |
| 4 | 4 | 6 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **91** | **163.2** |
| 5 | 4 | 6 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **92** | **164.8** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 5 | 4 | 4 | **93** | **166.4** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **94** | **168.0** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **95** | **169.6** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **96** | **171.2** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **97** | **172.8** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **98** | **174.4** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 4 | 5 | 4 | 5 | 4 | 4 | **99** | **176.0** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 5 | 5 | 4 | 5 | 4 | 4 | **100** | **177.6** |
| 5 | 4 | 6 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 5 | 5 | 4 | 6 | 4 | 4 | **101** | **179.2** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 5 | 5 | 4 | 6 | 4 | 4 | **102** | **180.8** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 5 | 5 | 4 | 6 | 4 | 5 | **103** | **182.4** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 4 | 5 | 5 | 4 | 6 | 5 | 5 | **104** | **184.0** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **105** | **185.6** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **106** | **187.2** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **107** | **188.8** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **108** | **190.4** |
| 5 | 4 | 7 | 4 | 5 | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **109** | **192.0** |
| 5 | 4 | 7 | 4 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **110** | **193.6** |
| 5 | 4 | 7 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **111** | **195.2** |
| 6 | 4 | 7 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **112** | **196.8** |
| 6 | 4 | 7 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 4 | 6 | 5 | 5 | **113** | **198.4** |
| 6 | 6 | 7 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 4 | 6 | 5 | 5 | **114** | **200.0** |
| 6 | 6 | 7 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 4 | 6 | 5 | 5 | **115** | **201.6** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 4 | 6 | 5 | 5 | **116** | **203.2** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 4 | 6 | 5 | 5 | **117** | **204.8** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 4 | 6 | 5 | 5 | **118** | **206.4** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 6 | 6 | 5 | 5 | **119** | **208.0** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 6 | 6 | 5 | 5 | **120** | **209.6** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | | 5 | 5 | 6 | 6 | 6 | 5 | 5 | **121** | **211.2** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | | 5 | 5 | 6 | 6 | 6 | 5 | 5 | **122** | **212.8** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 5 | 6 | 6 | 6 | 5 | 5 | **123** | **214.4** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 6 | 6 | 6 | 6 | 5 | 5 | **124** | **216.0** |
| 6 | 6 | 7 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 6 | 6 | 6 | 7 | 5 | 5 | **125** | **217.6** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 6 | 6 | 6 | 7 | 5 | 5 | **126** | **219.3** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 6 | 6 | 6 | 7 | 5 | 6 | **127** | **220.9** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 5 | 6 | 6 | 6 | 7 | 6 | 6 | **128** | **222.5** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **129** | **224.1** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **130** | **225.7** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **131** | **227.3** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **132** | **228.9** |
| 6 | 6 | 8 | 5 | 6 | | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **133** | **230.5** |
| 6 | 6 | 8 | 5 | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **134** | **232.1** |
| 6 | 6 | 8 | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **135** | **233.7** |
| 7 | 6 | 8 | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **136** | **235.3** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 7 | 6 | 6 | **137** | **236.9** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **138** | **238.5** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **139** | **240.1** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **140** | **241.7** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **141** | **243.3** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **142** | **244.9** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | | 6 | 6 | 7 | 6 | 7 | 6 | 6 | **143** | **246.5** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | | 6 | 7 | 7 | 6 | 7 | 6 | 6 | **144** | **248.1** |
| 7 | 6 | 8 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | | 6 | 7 | 7 | 6 | 8 | 6 | 6 | **145** | **249.8** |
| 7 | 6 | 9 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | | 6 | 7 | 7 | 6 | 8 | 6 | 6 | **146** | **251.4** |
| 7 | 6 | 9 | 6 | 7 | | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | | 6 | 7 | 7 | 6 | 8 | 6 | 7 | **147** | **253.0** |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | | 7 | 7 | 6 | 8 | 7 | 7 | **148** | **254.6** | |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **149** | **256.2** | |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **150** | **257.8** | |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **151** | **259.4** | |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **152** | **261.0** | |
| 7 | 6 | 9 | 6 | 7 | 6 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **153** | **262.6** | |
| 7 | 6 | 9 | 6 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **154** | **264.2** | |
| 7 | 6 | 9 | 7 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **155** | **265.8** | |
| 8 | 6 | 9 | 7 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **156** | **267.5** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 6 | 8 | 7 | 7 | **157** | **269.2** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **158** | **270.9** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **159** | **272.6** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **160** | **274.3** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **161** | **276.0** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 7 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **162** | **277.7** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 7 | 8 | 6 | 8 | 7 | 7 | **163** | **279.4** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 8 | 8 | 6 | 8 | 7 | 7 | **164** | **281.1** | |
| 8 | 6 | 9 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 8 | 8 | 6 | 9 | 7 | 7 | **165** | **282.7** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 8 | 8 | 6 | 9 | 7 | 7 | **166** | **284.3** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 8 | 8 | 6 | 9 | 7 | 8 | **167** | **286.0** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | | 8 | 8 | 6 | 9 | 8 | 8 | **168** | **287.7** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **169** | **289.4** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 7 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **170** | **291.1** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **171** | **292.8** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **172** | **294.5** | |
| 8 | 6 | 10 | 7 | 8 | 7 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **173** | **296.2** | |
| 8 | 6 | 10 | 7 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **174** | **297.9** | |
| 8 | 6 | 10 | 8 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **175** | **299.6** | |
| 9 | 6 | 10 | 8 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **176** | **301.2** | |
| 9 | 6 | 10 | 8 | 9 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 6 | 9 | 8 | 8 | **177** | **302.8** | |
| 9 | 6 | 10 | 8 | 9 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 9 | 6 | 9 | 8 | 8 | **178** | **304.4** | |