Terra Nostra (“Our Earth” in Latin) was commissioned in 2013 by Susan and Jeff Lubetkin, who specified that it should be about climate change. I was delighted by the challenge, as this is a cause I am passionate about. The original version of the score was completed in April 2015, and performed by the Lake Union Civic Orchestra in June of that year. The revised version of the score, which is having its world premiere today, was completed in December 2018, and recorded by Seattle Music at Bastyr University in January 2019.

Terra Nostra is 36 minutes long, including “Turning Back,” a poem by Emily Siff, written when she was 18 years old. It was important to include the voice and perspective of someone whose generation will be dramatically affected by the steadily accelerating changes in our climate and environment. Other than specifying a reflection on climate change, Ms. Siff had complete creative freedom in her approach. She read the poem live, in three sections, at the world premiere performance. Today her poem is being read by KING FM’s Lisa Bergman.

Terra Nostra is filled with themes and quotes that express precise images, phenomena, and direct references. Its architecture is based on a timeline spanning from before the Big Bang, through present time, and on to an unknown future. The overall form unfolds as follows:

1. **Pre-Big Bang** is followed by a gradual buildup using the harmonic series and the Fibonacci proportions, **Big Bang** (brass), the **beginning of Earth, time** (bass drum, timpani pulse), **light** (high harmonic in violins), **water** (vibraphone, harp), **flora** (clarinets, violins), **fauna** (bird calls in woodwinds), the **inexorability theme** (cellos, bassoons, bass clarinet; this is an important melody that will return, each time altered throughout the piece), **oceans** (cellos, violas, bassoons, brass), **humankind** beginning with **SHE** (oboe solo) followed by **HE** (cello solo with the same notes as SHE but in a different rhythm), followed by the **Rise of Civilization**.

2. The next section uses musical quotes to travel through time. It begins with the oldest piece of notated music ever discovered the Hurrian Hymn No. 6 (from Syria circa 1400 B.C.) in solo harp. This is followed by excerpts from Guillaume Dufay (1397-1474), J. S. Bach (1685-1750), W. A. Mozart (1756-1791), Beethoven (1770-1827), Wagner (1813-1883), Debussy (1862-1918), and Stravinsky (1882-1971).
3. The **Industrial Revolution** begins with the humankind theme and merges into a section depicting mass production. The piccolo introduces the **population growth** theme (based on an Indian melody, as India is poised to become the world’s most populous country by the end of the 21st century).

4. One of the bird calls returns but is slightly altered, foreshadowing the challenges ahead. The ocean theme comes back in full force, describing **rising seas**. The water theme returns, but on a xylophone instead of a vibraphone, symbolizing **drought**, and followed by **wildfires**. A sorrowful bassoon solo expresses the aftermath of fires and introduces the first of three poem readings.

5. The **population growth** theme reappears and is later quoted by a single clarinet, followed by other instruments with rapid accumulation. The “**circus politics, dance of the deniers**” section begins and grows into the **extreme weather** section, where the full orchestra is at its most intense. The birdcalls return, but this time are altered and greatly weakened, followed by the second poetry reading.

6. The next section (low brass, harp, strings) is the darkest yet, describing the worst and most damaging human impact on the environment (**severe air and water pollution**). The inexorability theme returns, along with timpani solo and trombones’ slow glissandos, describing **melting arctic ice**. The third and final poem reading takes place here.

7. Next a gradual tonal clash symbolizes the current **conflict between the constant, rapidly expanding world-wide growth and the need for sustainability**. Flora and stream themes return, expressing nature’s **resilience**. The solo oboe symbolizes that **each individual can make a difference** and depicts humanity’s capacity for resolve and greatness.

8. This section is based on a palindrome of the opening Big Bang as a form of rebirth, punctuated by an S.O.S. motive in the brass, and culminating with a quote from Bach’s chorale “Es ist genug” (“It is enough”) in the first oboe, solo cello, first trumpet and first violins, indicating that we have enough evidence and that **the point of no return is near, warranting immediate, global action of the greatest magnitude**.

9. The coda begins with the drought/fire pulse and theme and soon is joined by the bird, ocean and SHE motifs, expressing the resilience of nature as well as human ingenuity in seeking solutions and adapting to a very fast evolving world. The piece ends with a violin duet symbolizing **the possible and so necessary return to a state of harmony between humans and nature**.